

The Northwest.

Devoted to the Development of the New Northwestern States and Territories.

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GREAT FALLS OF THE YELLOWSTONE.

The chief feature of tourist travel the coming summer will unquestionably be excursions to the National Yellowstone Park, now easily accessible by rail. By the time the season for visiting the region of natural wonders begins, in July, the Northern Pacific branch line from Livingston will be completed to the borders of the Park. We shall continue to give in the successive numbers of *THE NORTHWEST*, during the spring and summer, views of the most striking features of the scenery in the Park, engraved from recent drawings and photographs. Our picture this month is of the Great Falls of the Yellowstone River.

Lord Dunraven, in his interesting book entitled "The Great Divide," thus describes this magnificent cataract:

"The Lower Fall is best seen from a little promontory which forms an angle in the cliff and partially overhangs the brink. Its height is 350 feet. The view from there of the river preparing for its leap is very good. The advancing volume of water flows rapidly but solidly to the very edge, then hurls itself into the air suddenly, and falls with a dull thud into a circular foaming caldron, bounded by steep precipices 800 feet high.

"The dark masses of water casting themselves continuously over the ledge, string out into long perfectly white threads of glistening air-bubbles and foam, and long before they reach the surface beneath seem to be entirely dissolved into fine spray and rain; but it is not so, for at the repeated shocks of the concussion, earth and air tremble. From the misty depths below the roar of the waters constantly arises in distinct vibrations like the humming of a harp string, and the steam floats up forever in great clouds. The cliff is very bare and naked, but on the western side it is partially covered with a carpet of bright green moss, nurtured by the ever-falling spray."

A LOOK AT LIVINGSTON.

F. D. D. in *Fargo Argus*.

We took supper at Billings, which is at present the liveliest place in the Yellowstone Valley, and will always be a good town. After another pleasant night's sleep we are awake on the side track at Livingston, and look from the windows to behold high mountain peaks, covered with snow, on every side except to the east.

Away to the northeast are Crazy Mountains, 9,000 feet high, on top of which snow can be seen every day in the year. Although the peaks look but a little way off, yet there is fifteen miles between them and where we stand. On the south of the town runs the Yellowstone, and beyond is a high table land on which can be seen several herds of cattle feeding, with the lower cañon mountains rising 3,000 feet above them. From the west end of the town site one can look away up the Yellowstone Cañon and see a huge snow-capped moun-

footed in the street. We really find it uncomfortable to wear an overcoat.

Livingston scenery is grand indeed, and the town site is the finest I have ever seen in the West. It is level, free entirely from ravines or boulders. I am told that at times the wind blows very hard here, but today is calm and warm, and the smoke from the houses goes straight up towards the clear blue sky. As I write a fleecy cloud is passing over the top of the loftiest peak of the Crazy Mountain, and hangs partly

across the face of the mountain, with the craggy tops appearing above, presenting a lovely picture. Livingston has about 800 inhabitants, and I should think about 200 houses and stores. There is yet no good hotel here, but at the Park House, where we took breakfast, we were served up mountain trout and baked Montana potatoes and good beef-steak, and with the sleeping car to sleep in we do first-rate.



GREAT FALLS OF THE YELLOWSTONE.

tain peak forty miles distant. The sides of the cañon appear almost perpendicular, and it does not look as though a goat could find a foot-path along its ragged sides; yet I am told there are ranches all along up the cañon, and that it is as easy a task to build a track up the cañon to the park as it was to build from Miles City here.

On the north, west and south, the town is shut in entirely by snow-capped mountains, while in Livingston there is no snow, and carpenters are working this second day in March with coats off and boys are bare-

shows that the gold bullion has increased during the past year to the extent of \$108,388.70, while the silver bullion has decreased \$7,700.88. The falling off in silver is due to the fact that in the majority of instances it is shipped direct from the mines to the East in its crude state to avoid any increase of freights. The increase of silver has doubtless been proportionately larger in the Helena district than that of gold, if the true amount could be ascertained. The amount of gold bullion has steadily increased every year since 1877.

DURING the year 1882 there was \$678,925.33 in gold bullion deposited in the Helena, Montana, Assay Office, and \$91,013.16 in silver. In 1881 there was gold bullion deposited to the amount of \$570,536.63, and silver to the amount of \$98,714.04. This exhibit

CAÑONS AND GLACIERS.

A Journey to the Ice Fields of Mount Tacoma

BY BAILEY WILLIS, ASSISTANT GEOLOGIST NORTHERN TRANSCONTINENTAL SURVEY.

The Puyallup River, which empties into Puget Sound near New Tacoma, heads in three glaciers on Mount Tacoma. During the summer months, when the ice and snow on the mountain are thawing, the water is discolored with mud from the glaciers and carries a large amount of sediment out to Commencement Bay. If the Coast Survey charts are correct, soundings near the centre of the bay have changed from one hundred fathoms and "no bottom" in 1867, to eighty fathoms and "gray mud" in 1877. But when the nights in the hills begin to be frosty, the stream becomes clearer, and in winter the greater volume of spring water gives it a deep green tint.

For twenty miles from the Sound the valley is nearly level. The bluffs along the river are of coarse gravel, the soil is alluvium, and a well sunk a hundred feet at the little town of Puyallup passed through gravel and sand to tide mud and brackish water. From the foot-hills to its mouth the river meanders over an old valley of unknown depth, now filled with material brought down by its several branches. About eighteen miles above its mouth the river forks, and the northern portion takes the name of Carbon River; the southern was formerly called the South Fork but it should retain the name of Puyallup to its next division far up in the mountains. A short distance above their junction both Carbon River and the Puyallup escape from narrow, crooked cañons, whose vertical sides, one hundred to three hundred feet high, are often but fifty feet apart. From these walls steep, heavily timbered slopes rise two hundred to eight hundred feet to the summits of the foot-hills. These cañons link the buried river basin of the lower stream with the upper river valleys. The latter extend from the heads of the cañons to the glaciers. They are apparently the deserted beds of mightier ice rivers, now shrunk to the very foot of Mount Tacoma.

From New Tacoma the entire course of the Puyallup and part of Carbon River are in view. Across Commencement Bay are the tide marshes of the delta; back from these salt meadows the light green of the cottonwoods, alder and vine-maple mark the river's course, till it is lost in the dark monotone of the fir forest. No break in the evergreen surface indicates the place of the river cañons; but far out among the foot-hills a line of mist hangs over the upper valley of Carbon River, which winds away eastward, behind the rising ground, to the northern side of Mount Tacoma. Milk Creek, one of its branches, drains the northwest spur, and on the western slope the snows accumulate in two glaciers, from which flow the North and South Forks of the Puyallup. These streams meet in a level valley at the base of three singular peaks, and plunge united into the dark gateway of the cañon.

THROUGH THE PRIMEVAL FOREST.

A trip to the grand snow peak from which these rivers spring was within a year a very difficult undertaking. There was no trail through the dense forest, no supply depot on the route. No horse nor donkey could accompany the explorer, who took his blankets and provisions on his back, and worked his way slowly among the towering tree trunks, through underbrush luxuriant as a tropic jungle. But last summer a good horse trail was built from Wilkeson to Carbon River, crossing it above the cañon, sixteen miles below the glacier, and during the autumn it was extended to the head of the Puyallup. Wilkeson is reached by a branch railroad from New Tacoma. It is on a small tributary of Carbon River, called Fletts Creek, at a point where the brook runs from a narrow gorge into a valley about quarter of a mile wide. Coal mines are opened at this point. The horse trail climbs at once from Wilkeson to the first terrace, four hundred feet above the valley; then winds a quarter of a mile back through the forest to the second ascent of a hundred feet, and then a mile over the level to the third. Hidden here beneath the

thick covering of moss and undergrowth of the primeval forest, fourteen hundred feet above the present ocean level, are ancient shore lines of the sea, which has left its trace in similar terraces in all the valleys about the Sound. Thence the trail extends southward over a level plateau. Carbon River Cañon is but half a mile away on the west, and five miles from Wilkeson the valley above the cañon is reached. The descent to the river is over three miles along the hillside eastward.

From Wilkeson to the river the way is all through a belt of forest, where the conditions of growth are very favorable. The fir trees are massive, straight and free from limbs to a great height. The larger ones, eight to twelve feet in diameter on a level with a man's head, carry their size upward, tapering very gradually, till near the top they shoot out a thick mat of foliage and the trunk in a few feet diminishes to a point. One such was measured; it stands like a huge obelisk 180 feet, without a limb, supporting a crown of but forty feet more. The more slender trees are, curiously enough, the taller; straight, clear shafts rise 100 to 150 feet, topped with foliage whose highest needles would look down on Trinity spire. Cedars, hemlocks, spruce and white fir mingle with these giants, but they do not compete with them in height; they fill in the spaces in the vast colonnades. Below is the carpet of deep golden green moss and glossy ferns, and the tangle of vines and bushes that cover the fallen trunks of the fathers of the forest.

THE AWFUL SOLITUDE OF THE WILDERNESS.

The silence of these mountains is awesome, the solitude oppressive. The deer, the bear, the panther are seldom met; they see and hear first and silently slip away, leaving only their tracks to prove their numbers. There are very few birds. Blue jays, and their less showy gray, but equally impudent, cousins, the "whiskey jacks," assemble about a camp; but in passing through the forest one may wander a whole day and see no living thing save a squirrel, whose shrill chatter is startling amid the silence. The wind plays in the tree tops far overhead, but seldom stirs the branches of the smaller growth. The great tree trunks stand immovable. The more awful is it when a gale roars through the timber; when the huge columns sway in unison and groan with voices strangely human. It is fearful to lie in the utter darkness of a stormy night, listening to the pulsating rush of the wind, the moan of the forest and the crash of uprooted giants upon the ground—listening with bated breath for the report which may foretell the fall of yonder tall decaying shaft, whose thick, deep cleft bark blazed so brightly on the now dying camp fire. The effect of one such storm is seen in Carbon River Valley, above and below where the trail crosses. The blast followed the stream and the mountain slope on the south side; over an area eight miles long and a half a mile to a mile wide the forest is prostrate. Single trees stand gaunt and charred by a recent fire, but their comrades are piled like jackstraws, the toys of the tornado. Over and under each other they lie, bent and interlaced, twenty, thirty feet deep. Pigmy man strained his eyes to see their tops, when they stood erect; now he vainly stands on tiptoe to look over them in their fallen majesty.

To the head of Carbon River from the bridge, on which the trail crosses it, is about sixteen miles. The rocky bed of the river is 100 to 200 yards wide, a gray strip of polished boulders between sombre mountain slopes, that rise sharply from it. The stream winds in ever-shifting channels among the stones. About six miles above the bridge Milk Creek dashes down from its narrow gorge into the river. The high pinnacles of the spur from which it springs are hidden by the nearer fir-clad ridges. Between their outlines shines the northern peak of Mount Tacoma, framed in dark evergreen spires. Its snow fields are only three miles distant, but Carbon River has come a long way round. For six miles eastward the undulating lines of the mountains converge, then those on the north suddenly cross the view, where the river cañon turns sharply southward.

Three miles from this turn is Crescent Mountain, its summit a semi-circular gray wall a thousand feet high,

the rim of a large crater. At sunset the light from the west streams across the head of Milk Creek and Carbon River, illuminating these cliffs as with the glow of volcanic fires, while twilight deepens in the valley. The next turn of the river brings Mount Tacoma again in view. Close on the right a huge buttress towers up, cliff upon cliff, 2,500 feet, a single one of the many imposing rock masses that form the Ragged Spur between Carbon River and Milk Creek. The more rapid fall of the river, the increasing size of the boulders, show the nearness of the glacier. Turning eastward to the south of Crescent Mountain, you pass the group of trees that hide it.

FIRST VIEW OF A GLACIER.

This first sight is a disappointment. The glacier is a very dirty one. The face is about 300 feet long and thirty to forty feet high. It entirely fills the space between two low cliffs of polished gray rock. Throughout the mass the snows of successive winters are interstratified with the summer's accumulations of earth and rock. From a dark cavern, whose depths have none of the intense blue color so beautiful in crevasses in clear ice, Carbon River pours out, a muddy torrent. The top of the glacier is covered with earth about six inches deep, contributed to its mass by the cliffs on either side and by an island of rock, where a few pines grow, entirely surrounded by the ice river. The eye willingly passes over this dirty mass to the gleaming northeast spur of the mountain, where the sunlight lingers after the chill night wind has begun to blow from the ice fields.

The disappointment of this view of the glacier leaves one unprepared for the beauty of that from Crescent Mountain. The ascent from a point a short distance down the river is steep, but not dangerous. The lower slopes are heavily timbered, but at an elevation of 4,000 feet juniper and dwarf pine are dotted over the grassy hillside. Elk, deer and white mountain goats find here a pleasant pasture; their trails look like well trodden sheep paths on a New England hill. A curious badger-like animal, sitting erect on his hind legs, greets one with a long shrill whistle that would make a schoolboy envious, but trots quickly away on nearer approach. The crest of the southwest rim of the crater is easily gained, and the grandeur of the view bursts upon you suddenly. Eastward are the cliffs and cañons of the Cascade Range. Northward forest-covered hill and valley reach to Mount Baker and the snow peaks that break the horizon line. Westward are the blue waters of the Sound, the snow-clad Olympics and a faint soft line beyond; it may be the ocean or a fog bank above it. Southward, 9,000 feet above you, so near you must throw your head back to see its summit, is grand Mount Tacoma; its graceful northern peak piercing the sky, it soars single and alone. Whether touched by the glow of early morning or gleaming in bright noonday, whether rosy with sunset light or glimmering ghost-like in the full moon, whether standing out clear and cloudless or veiled among the mists it weaves from the warm south winds, it is always majestic and inspiring, always attractive and lovely. It is the symbol of an awful power clad in beauty.

This northern slope of the mountain is very steep, and the consolidated snow begins its downward movement from near the top. Little pinnacles of rock project through the mass and form eddies in the current. A jagged ridge divides it, and part descends into the deep unexplored cañon of White River, probably the deepest chasm in the flanks of Mount Tacoma. The other part comes straight on toward the southern side of Crescent Mountain, a precipice 2,000 feet high; diverted, it turns in graceful flowing curves, breaks into a thousand ice pyramids and descends into the narrow pass, where its beauty is hidden under the ever-falling showers of rock.

AN ANCIENT VOLCANO.

This rim of the crater you stand upon is very narrow; a hundred feet wide, sometimes less, between the cliff that rises 2,000 feet above the glacier and the descent of a thousand feet on the other side. Snow lies upon part of this slope; stones, started from the edge, leap in lengthening bounds over its firm surface and plunge with a splash into the throat of the

volcano, from which they had been thrown molten. A lakelet fills it now, and the ice slope, dripping into it, passes from purest white to deepest blue.

A two days' visit to this trackless region sufficed only to see a small part of the magnificent scenery. White River Cañon, the cliffs of Ragged Spur, the northern slope of Mount Tacoma, where the climber is always tempted upward, might occupy him for weeks. Across the snow fields, where Milk Creek rises, is the glacier of the North Fork of the Puyallup, and the end of the horse trail we left at Carbon River is within six miles of its base. When a trail is built up Carbon River, the way across this divide will be found, and, with comfortable stopping places on the two rivers, the tourist can pass a delightful week amid scenery we now cross the ocean to Switzerland to see.

NORTH DAKOTA PROSPECTS.

From the Fargo Republican.

Never before were the prospects of North Dakota so bright as they are now at the opening of this spring of 1883. Every mail from the East brings us intelligence of the greatest migratory movement to the West that has ever taken place in the history of our country. There is an immigration movement in nearly every New England State, while there are parties in nearly every county in the great State of New York who are going to start for the New Northwest as soon as spring fairly opens. Thousands will also come from western and northern Pennsylvania. The State of Ohio will also furnish her quota of immigrants, as will also Indiana, Illinois and others of the central Western States. The present year will witness the influx of a large number of people and of millions of capital into North Dakota. The whole country seems at last to have waked up to the attractions presented by this greatest wheat field of the world, and of the rare opportunities it offers to both capital and labor. Here is a land where the capitalist can come and invest his money sure of rich and speedy returns, and where the laboring man can acquire a home and in a few years a competence. No such tempting inducements are held out in any other quarter of the globe. Here the Government has thousands of acres of the richest land that the sun ever shone upon, which will be given away to the actual settler, and right here there is a ready and cash market for all that may be produced upon the land. Where a few years ago there was nothing but wild prairie there are now populous towns and cities, with society and educational privileges equal to those of Eastern towns and cities which have been more than a century growing up to their present size. Our railroad facilities, already great, are being constantly increased. Now is the time for the immigrant to come and take part in building up the grandest, mightiest and richest State in the Union—the garden spot of the great republic. Now is the time to come, for in a few years at most the land will all be taken up. The immigrants who come this year will never have reason to regret it. They can get to be the proprietors of good farms for almost nothing, which, in less than five years, will be worth from \$20 to \$30 per acre.

THE Fort Maginnis freight and transporting will be done at Custer, Montana, and to this end the N. P. R. R. Company have erected platforms to receive and load the ore from these mines.

BILLINGS, MONTANA.

The One-Year-Old Town in the Yellowstone Valley.

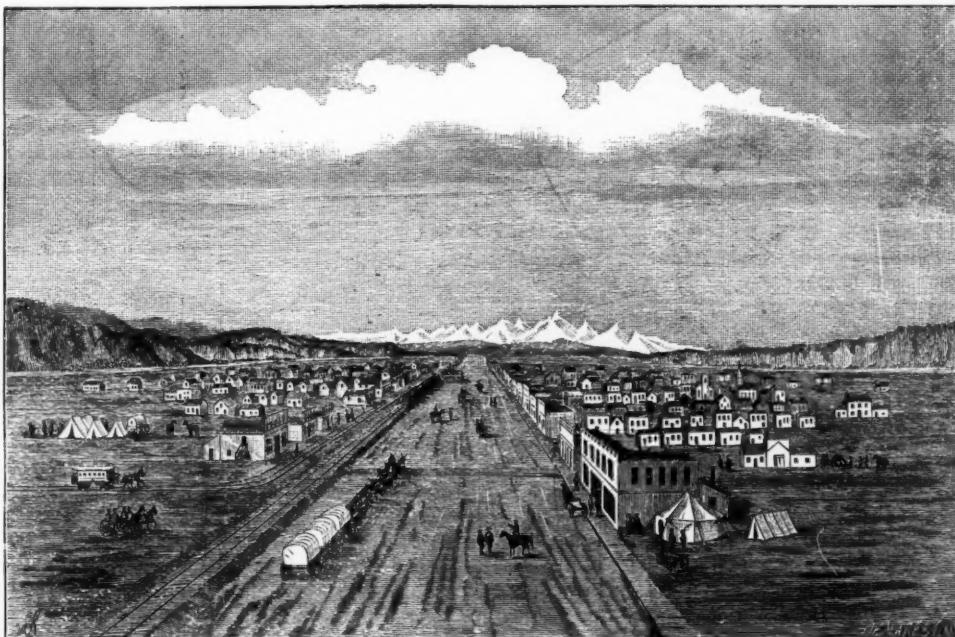
We print on this page a picture of the new town of Billings, on the Northern Pacific Railroad, in the Valley of the Upper Yellowstone. The sketch was taken before the new buildings began this spring had made any show and hardly does justice to the place as it looks at this date. It shows, however, the general appearance of the town, the valley, the bluffs and the distant mountain range covered with snow. A year ago this month the first house was built in Billings. Now the population is nearly 2,000, and the increase of the present season promises to add a thousand more. A large hotel and depot combined is now being erected, and numerous new stores, shops and dwellings are going up. The prosperity of the town arises—first, from the fertile valley lands adjacent, irrigated by a ditch thirty miles long, which supplies the farms with water; second, from the railroad business which the end of the two divisions makes; and third, from the trade of the Upper Valley and of the new grazing, farming and mining region north of the Yellowstone, a description of which will be found in another column. The place is an important cattle shipping point and a

HOW COLD WAVES TRAVEL.

Cold waves, so called—a name for which we are indebted to recent meteorological science—do not appear to move in some instances much faster than a railroad express train. They vary, however, in their rate of motion. Where do they come from? It is not easy to say. It might be found, if one could travel at express train speed from the mountains of Montana and the frozen regions farther north, that the cold continued all the way to eastern Alaska, and on to Behring Strait, with even a greater degree of intensity. In fact, the coldest region is probably the wide expanse west, and especially northwest, of Hudson's Bay, in the neighborhood of the magnetic pole. A "cold wave" is a wave of heavy air, following the rarefied track of "low barometer," and changing the rarefied and milder atmosphere (which is usually also stormy) to one of clear, cold skies; a heavy air, full of tonic power, and exhilarating and hunger producing to sound and healthy animal life. The establishment of the modern Government weather observation stations, with their appliances, including the electric telegraph and the daily press, has enabled the country to see and comprehend something of the movements of these frequent cold waves. The movement is as marked as the advance of a veritable sea wave. The telegraph heralds its start from the Rocky Mountains (it always seems to begin there, though in fact it rarely does—having its origin much further north), and its advance can be timed like that of a railroad train. Its speed varies from forty to sixty, or sometimes even seventy miles an hour; usually it would seem about fifty. It rolls over the country, a real wave, an aerial counterpart, on the shore, of its congener, the tidal wave of the ocean, and its direction is usually from the northwest to the southwest. It sweeps slowly down from the frozen waves of the Asiatic shore, and the equally frigid winds of the American main land in the Arctic circle, to our Atlantic coast—its breadth reaching all the way from Nova Scotia to Cape Hatteras, and frequently

making its chill presence felt as far south as Florida. The Bermudas—which lie just south of the Gulf Stream, a little over 600 miles almost due east of Charleston—feel the influences of our "cold waves" very perceptibly. That solitary little group of small, low-lying coral islands, which can be reached by steamer from New York in the same time that it would take to go to Savannah, happen to lie on the leeward side of the Gulf Stream; and that great thermal current of the ocean forever saves them from frost, and keeps them in spring foliage all winter; but while it finely tempers and modifies the north wind, it cannot quite rob it of all its intrinsic character, and the result is a wind that may be at times cool, and frequently boisterous, but never really cold; and those lonely islands, surrounded by wide-reaching coral reefs, have all winter a pleasant climate of spring. That is almost all that they, or the more southern islands of the Bermudas, ever know of our winter "cold waves." These come in an almost rhythmical succession, and have their causes, doubtless, as potent as those of the ocean's tides, which they strikingly resemble.

BARNUM has sent word along the line of the Northern Pacific that as soon as it is completed his aggregated wonder show will bowl along to the cities of the sunset land.



VIEW OF BILLINGS, MONTANA.

centre for general business for a very large area of country. It was named in honor of Frederick Billings, the former President of the Northern Pacific, by the present management of the company. Two excellent weekly newspapers are published in the town—the *Herald* and the *Post*—and there are already two churches, many large stores and all kinds of mechanic shops. Stages run to Benton, on the Upper Missouri, and when the Yellowstone Park season opens a line of conveyances will take travelers to that wonderful region.

On our fifth page we give an illustration of a view in the Yellowstone Valley above Billings, showing the newly opened farms and irrigating ditches and a stretch of river, perhaps twenty miles long. This portion of the valley is called the Clarke's Fork Bottom, from the junction of that stream with the Yellowstone at the upper extremity of this particular area of bottom lands. The name is a misnomer, however, and should be abandoned, inasmuch as the Clarke's Fork comes into the main river on the opposite side from the bottoms, and they lie, not along it, but entirely in the Valley of the Yellowstone itself.

This part of the valley is pretty well settled by homesteaders and purchasers of railroad lands for thirty miles above Billings, and contains two growing villages, Park City and Cañon City.

THE BUNCH GRASS REGION.

The Enormous Profits Made in Stock Raising
In the West.*Z. L. White in Providence Star.*

"I should suppose that your cattle would all starve or freeze to death during your long and terribly cold winters, unless you provided them with shelter and put by some hay for use when deep snows cover the ground."

This was a remark which I made to a prominent raiser who shared with me the "dickey" seat on the top of the Montana stage coach. We had been toiling nearly all day over the Lava Beds which stretch in a desolate belt sixty miles wide across Idaho. The heat of the sun equaled in intensity that of the tropics, and this, combined with the thick cloud of dust in which we had been enveloped all day, had made the tedious journey anything but a sociable one. Towards evening we had come up out of the Lava Beds into the foot-hills of the main range of the Rocky Mountains, which forms the boundary line between Idaho and Montana, and, as the team of six powerful horses quickened their gait from three to six miles an hour, and the dust subsided so that we were able to get more than occasional glimpses of the leaders, we fellow-travelers joked a little with each other about our personal appearance, covered as we were from head to foot with a thick layer of pulverized earth, and began to get acquainted.

"Well, some of our cattle do die," replied my new acquaintance. "If they are overtaken in an unsheltered place when a severe, driving storm comes on they may wander away from, rather than towards, a cover, and if they do so they are pretty sure to

DIE OF EXHAUSTION

and exposure. But our losses in ordinary winters are comparatively light, not more than five or six per cent., while the cost of shelter and feeding would be far greater. You wonder how cattle can live at all in such a country if left all winter to shift for themselves? Well, you will understand it better when you see Montana. We shall be over on Red Rock Creek, one of the tributaries of the Missouri River, by morning, and you will find the country entirely different from any you have ever seen, except, perhaps, some portions of the Black Hills of Dakota.

This ended our talk about cattle raising for that night. After the sun went down and we began to gain altitude as we approached the top of the mountain pass, my friend sought a seat inside the stage coach, while I, securing a place by the side of the driver, wrapped myself up in blankets and buffalo robes, fastened the boot across my breast, and slept as much as the intense cold of the night and my rather uncomfortable seat would permit. As we came down, in the gray of the morning, on the northern (eastern) side of the backbone range of the continent and followed the winding valleys between the foot-hills, we came upon a crystal mountain brook along whose banks the road led for about sixty miles. This was Red Rock Creek, which derived its name from the color of the bluffs and cliffs that rear their heads at a distance from the stream on either side.

During that day and the next I saw some typical Montana country, and, with the help of my stock-raising friend, was able to understand how it was possible for cattle to subsist without shelter or feeding even during a severe winter. Our road followed the course of Red Rock Creek until that stream emptied into the Jefferson River. The bottom lands of these streams—that is, the lands that could be watered by irrigating ditches—comprised only a narrow strip on either side. These lands were taken up and in a very few instances I saw

FINE CROPS OF GRAIN

and some vegetables. But many of the ranches were the head-quarters of cattle raisers who had large herds pasturing in the neighboring foot-hills. We saw very few cattle, and would not have known that we were passing through a stock-rearing country if we had not been told so.

The valleys of this and other streams in Montana are narrow, but the foot-hills lying between them and the higher ranges of mountains are very extensive. Seen

from a distance these hills have a smooth, almost polished, appearance, their color being a grayish buff. Except in the cañons which separate them they are generally bare of timber. At first I supposed that the color was derived from the nature of the soil, but I afterwards found out, by actually traveling over them, that they were covered with a species of grass which, as it is approached, has the appearance of ripe grain which has stood long enough to lose its bright yellow color. This is the famous bunch grass of Montana and Dakota. It does not cover the ground like the cultivated grasses of the East or the blue grass of Kentucky and adjoining States, but grows in scattered bunches, so that, although, seen from a little distance, the ground appears to be entirely covered with it, it actually stands very thinly over the surface. This

BUNCH GRASS

comes up in the spring and gets its growth during the rains of early summer. Then, when the dry season begins, the seed which it bears upon the top ripens, but instead of falling out, as the seeds of most grasses would do, is firmly held in the head which encloses it, and remains upon the stalk until the following spring. The stalk itself is strong and wiry, containing an abundance of silica, and is not easily broken.

When the cattle are turned out upon a range covered with bunch grass, they browse off the heads containing the seeds, but do not eat the leaves and stalk, which are as destitute of nutrition as the stalks of rye, barley or wheat would be. But the seeds seem to have concentrated in them all the elements fitted to furnish food for cattle which the grass, during its short period of growth, has been able to draw from the remarkably rich soil, and their fattening qualities are said to be equal to those of the best grain. It is because the cattle feed upon these seeds, rather than upon the leaves and stalks of grass, that Montana beef is of so much better quality than that raised in the territories farther south.

The cattle upon these mountain ranges go to the streams for water about once in two or three days. After satisfying their thirst they gradually work back into the hills until they begin to feel uncomfortable for want of water, when they turn their faces toward the stream again, grazing along leisurely until they come to its neighborhood, when, impelled by their long abstinence from water, they plunge headlong into the current.

As I have already said, the bunch grass does not stand thickly upon the ground, and, therefore, in spite of its nutritious qualities, a large section of country is required for the subsistence of a herd of cattle.

OLD STOCK RAISERS

say that a range should contain at least eighteen acres of land per head, and that if it is any smaller the feed is in danger of becoming short before the season is over. The strength and elasticity of the stalk of the bunch grass enable it to stand up in the severest storms and even to keep its head above deep snows. It follows, therefore, that no matter how severe the winter may be, the cattle are very certain to find, at least on the southern slopes of the hills and in sheltered cañons, an abundance of the bunch grass with its heads sticking up above the snow. This explains why cattle are not only able to live, but to keep in good condition, in Montana throughout the winter, even though the ground be covered with one or two feet of snow. The greatest destruction of cattle is caused by the severe storms which frequently prevail in the northwestern sections of the country, and which are known in some localities as

BLIZZARDS.

As a rule, cattle will anticipate the approach of a storm, and will instinctively move up the cañons to where, being narrow, and their sides steep and covered with a sparse growth of stunted pine and cedar trees, they afford a partial shelter. But if the cattle are caught by a blizzard in an exposed place, they are very apt to flee before the driving storm rather than to seek shelter, when they must face the wind and snow to reach it. In such cases they often wander off twenty or thirty miles, or even farther, and finally die from exhaustion and starvation.

In Montana cattle herding is conducted somewhat dif-

ferently from that in Kansas, Nebraska and Colorado, which I described in my last paper of this series. A stock raiser, as a rule, establishes himself upon a ranch which he locates upon one or both sides of a stream, along which he seeks to secure the greatest possible frontage. Owning the land upon the stream, he is able to control all the country lying back of it, as access to the water is one of the absolute essentials of the stock ranch. Since there is no necessity of keeping the cattle together in a herd, guarding them day and night, and moving the "outfit" as the herd passes from one part of the range to the other, the cowboys of Montana make their head-quarters on the ranch, leave the cattle to shift for themselves, but patrol the boundaries of the range and the avenues by which the animals are likely to stray, following any trails they may find, driving back such as have gone beyond the range. They also ride frequently over those parts of the range where the cattle are, on the lookout for diseased or disabled animals, in order to give them such attention as they may need. This work is kept up in the winter as well as in the summer, when the condition of the weather will permit.

SHEEP RAISING

has become in Montana second in importance only to that of cattle herding, and some large fortunes are just now being accumulated by the owners of bands of sheep, who began a few years ago with little or no capital. Sheep need much closer personal attention than cattle. They usually remain together in bands, moving from place to place as the feed is eaten up, and they are generally corralled at night by placing portable fences about them in order to protect them from the ravages of wild animals. In the winter the sheep have to be sheltered, and in severe weather to be fed. Rude sheds are erected; hay, made from bunch grass, which is cut just as it ripens, is put up to supply them in case of need. One of the best sheep farmers in Montana told me, at the time of my visit there, that he had not been obliged to feed his sheep for three winters, but that he put up a quantity of hay every year in order to provide for any emergency.

While the feeding of cattle on the range does not destroy the grass, which will grow with equal abundance year after year, even though it is well pastured over, the feeding of sheep seems not only to kill the roots, but to destroy the seeds to such an extent that those portions of the range grazed over by them are unfit for the pasture of either sheep or cattle for several years afterwards. Cattle raisers, therefore, look with great disfavor upon the introduction of a band of sheep in their neighborhood. If the latter become numerous, the owners of herds of cattle are obliged to seek new ranges.

The profits of sheep and cattle raising in Montana have thus far been almost fabulous. Three-year-old steers, in good condition, worth, on the range, in Montana, eighteen dollars, have cost not more than five or six dollars to raise. And a band of sheep, by the sale of wool, and natural increase, unless ravaged by disease, has very frequently brought a profit of 200 per cent. upon its cost, in the first three years after it was established on a range. These enormous profits were made at a time when the cattle ranges of Montana were from 300 to 600 or 800 miles from the railroads, and when the only means of transporting cattle to market, unless they were driven long distances, was to send them down the Missouri River during the season of navigation. With the extension of the Northern Pacific Railroad up the Yellowstone Valley into the Montana Territory, and with the Utah Northern Railroad penetrating it from the south, the means of sending stock to market have been greatly improved, and the profits of the business ought certainly to be greater than they formerly were.

THE Auburn Advertiser says: A number of gentlemen met at the Gaylord House, this afternoon, to make arrangements for emigration to Dakota. About April 10th a colony of 100 people will leave Moravia, Weedsport, Syracuse, Auburn and other places in this and adjoining counties, to take up a residence near Ellendale, Dakota. Previous meetings have been held, and the plan has been pretty thoroughly discussed. The colony will be known as the "Empire."

THE COUNTRY NORTH OF BILLINGS.

Notes of a Trip from the Yellowstone to the Upper Missouri.

The following information concerning the region north of Billings, Montana, is gathered for THE NORTHWEST from a conversation with Mr. Geo. B. Hulme, the enterprising Secretary of the Minnesota and Montana Land and Improvement Company, who last winter made a journey from Billings to Benton:

Leaving Billings, the new road to Benton leads in a northwest direction through a rolling country till a place called Rocky Butte is reached, where there is a stage station and an alkali spring, the only one found on the west side of the Bull Mountain Range. What is known as the Lake Basin is then crossed, twenty-three miles square, the northern boundary of which is the Bull Mountain Range, a large portion of which is underlaid by coal fields. The principal deposit, showing a vein of twenty-one feet, is distant from Billings twenty-eight miles. A good feature of the Bull Mountains is that there is scarcely any snow. They are a high plateau gradually rising all the way, and to the north and west they lead down to the Musselshell Valley, and Painted Robe Creek, which are the head-quarters of three large cattle ranches having from 15,000 to 25,000 head each — perhaps 80,000 head in all.

The Upper Musselshell Valley is about forty-two miles long, varying from one and a quarter to three miles in width. There is a good deal of underbrush and a little cottonwood timber, which with the high bluffs form a great protection for sheep. Cattle will not touch grass where sheep go, and stay mainly on the creeks. Sheep keep at the head of the Musselshell Valley and in the Judith country on the east side of the Belt Mountains.

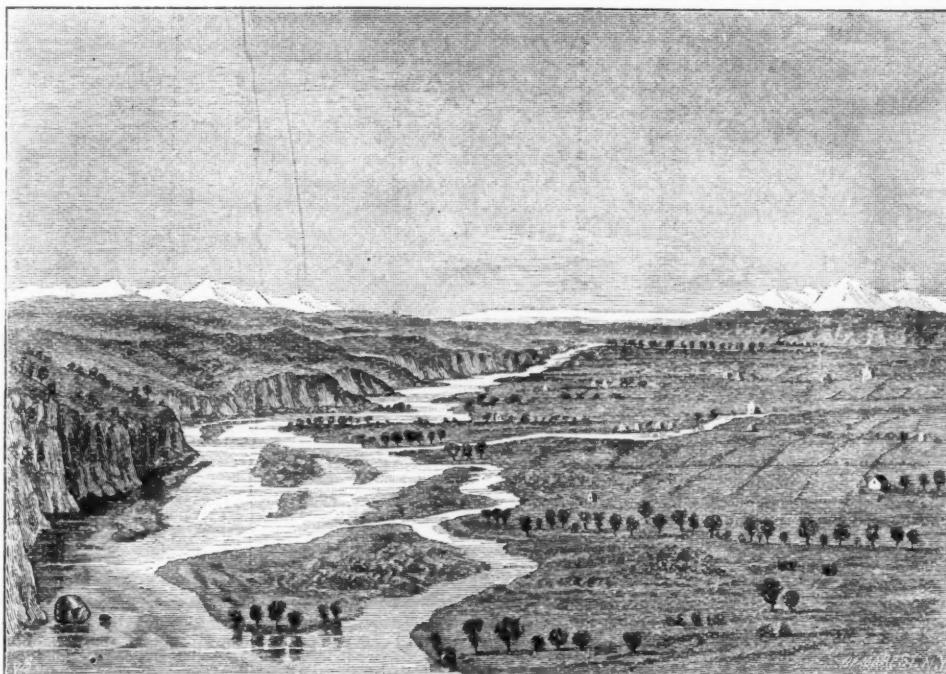
After leaving the Musselshell Valley the road gradually ascends toward the Judith Gap, mainly through Bad Lands. Cattle also range in this locality and in the Bad Lands as far as the foot-hills of the Snowy Mountains. Towards the gap there are several creeks, the principal being Careless Creek. At the head of all these streams are to be found sheep ranches, the bands varying from 1,500 to 2,000 head. Game abounds, particularly antelope and black tail deer, with occasional buffalo. Elk have disappeared from the Snowies for the last two seasons. The last buffalo statistics show only 800 hides that were brought in from this region, and these animals will soon become extinct. There are merely a few solitary bulls around.

The new mail road for Benton from Burke's Ranch to the Musselshell will go straight across to Oka, instead of following the old trail around by Martensdale, which makes a saving of about thirty-eight miles between Benton and the Northern Pacific Railroad. It is a natural road all the way. Sevrance, the king of sheep men in the Territory, has his ranch about two miles from Oka. He has ten or eleven bands of about 2,000 head each. The Judith country is about eighty miles square and is watered by innumerable creeks and the Judith River. The finest land is just along the Valley of Big Spring Creek, inhabited by half-breed Indians, and the next best land is at Warm Spring Creek and Ross' Fork, which is already taken by ranchmen. The foot-hills of the Two Moccasins, two isolated mountains, are a favorable summer range for cattle; 30,000 may be seen here at one time. This point is 160 miles from Billings.

Twenty-five miles to the eastward are the Judith Mountains, in which are located the Maginnis mines, which produce large quantities of low grade ore and only require capital for thorough development. The principal drawback is the want of water. Fort Maginnis is distant only three miles from Maiden, the mining camp, to which a stage road has been now constructed across the divide. Previous to the construction of this road, a detour of thirty-five miles had to be made. Eastward of the Judith Mountains are the Flat, Willow and Box Elder Creeks, which are the head-quarters of extensive cattle ranches.

To the north of the Judith Basin are the Highwood Mountains, and to the west, the Little and Big Belts. In the Big Belt are situated the Barker mines, which have been shipping to Billings an average of 90,000 pounds of bullion per month. These mines are 180 miles from Billings. A little further to the southeast is the District of Mogo, in which has already been discovered some very rich leads. The creeks between these two points are exclusively taken up by sheep men, who have bands all along the eastern face of the Belts.

At the head of the Judith River valuable deposits of coal have been discovered, which, though of lignite, appear to be of much superior quality to that usually found, and there is also some good limestone. The Valley of the Judith is very thickly settled. Those



THE YELLOWSTONE VALLEY ABOVE BILLINGS.

having cattle in the vicinity make their head-quarters on the banks of the river. Some 15,000 acres of this land will be broken this spring, experiments on a very small scale last year having proved the great fertility of the soil. There are not more than 80,000 acres of agricultural land in the Judith Valley above its junction with Ross' Fork. Shortly after reaching that point the river enters a deep cañon, through which it runs to its confluence with the Missouri. In the bottom are small patches frequently under water during the June rises, and settlers do not permanently reside there.

To the south of the Little Belt Mountains are the Crazies, which are still one of the best preserves for elk. The winters in the Judith country are more severe than to the south of it, but the Musselshell Valley is comparatively free from snow.

A FARGO boy was coming up First Avenue yesterday morning on a sled drawn by a brindle pup. The pup stopped to argue a fine point with another dog about twice its size. When the police sorted the small boy out of the wreck and shook the dog hair off from him, he said he lived on Eighth Street and had marbles to bet on his pup.—*Fargo Republican*.

WINTER FISHING IN MONTANA.

Catching Trout in the Yellowstone near Livingston.

F. D. D. in Fargo Argus.

Arriving at Livingston on the 3d of March the ice is found to be all out of the river, buildings going up rapidly, with laborers working in their shirt sleeves, and the base ball club playing a match game on the common back of the town. Cellars being dug show no frost in the ground. On the mountain peaks which surround the town snow is to be seen now, as it is on any day in the year, but the valley is dry and warm. The atmosphere is very fine and invigorating, having all the stimulating tendencies of a blizzard, without its severity. The doors of the stores and houses stand open and everything has the appearance of May. Livingston is situated on the west bank of the Yellowstone, just at the point where the river gushes forth from the lower cañon. The town is on a beautiful level plain, which is from three-quarters of a mile to a mile in width. Just back of the town runs one branch of the Yellowstone, with an island between it and the main stream, and beyond the river is an extended elevated plateau or table land stretching away from one to three miles to the base of the mountains, and running as far

as the eye can reach to the southeast along the receding mountain base. To look from the town it is apparently about on a level with the eyes of the spectator, as smooth and level as a billiard table, and its yellow meadows form a striking contrast with the rough, gray mountains beyond. Looking southwest from the town one sees two huge mountains whose bases seem to meet, with scarcely room for a mountain sheep to find a foot-path between or along their steep sides. But out from between these mountains flows the beautiful Yellowstone over its pebbly bed, murmuring as it flows like the sound of a distantly drumming pheasant or the whir of a bevy of birds.

After a tour of the town in search of flies and fishing rods, and securing a driver with a two-seated spring wagon and a spanking pair of horses, the start is made

for a trip up the Yellowstone Cañon to view the grand scenery and try our skill in the piscatorial art. From town it looks only a five minutes' drive to the mouth of the cañon, but fully three-quarters of an hour elapses before it is reached. As the team approach, what seemed to be an impassable barrier widens out into a beautiful valley of about a quarter of a mile wide. Entering the mouth of the cañon the scenery is grand indeed. On either side the rocky bluffs rise towering three hundred feet above our heads. On the right the mountain seems to be cut right off like cutting off the side of a pineapple, and the different layers of strata are a grand study for the geologist. The massive pile slopes in a gentle curve from the apex as high as you can look away down and into the ground at the entrance of the cañon, as if the weight of the mountain had sunk its base miles beneath the earth. On the left the formation is similar, only more broken and rugged. Many peaks and hills seem to be thrown together as if by some earthquake, and the massive rocks are shuffled together as if they had been dumped from the devil's wheelbarrow in a mad endeavor of his Satanic majesty to block the way of the majestic river. The strata on both sides of the river slope at an angle of forty-five degrees to the northeast, as though they had been piled in there to guard and brace the mountains back of them.

Every foot of the cañon brings new wonders and beautiful sights to view. Here the river widens out and ripples over a pebbly beach or surrounds a bushy island within its emerald clasp, or there it dashes madly between rocky gorges, or disappears entirely from view amidst wild entangled thickets, and again widens out into a placid mirror in whose still depths are pictured the lofty cliffs and mountain peaks surrounding it, forming a picture too grand to be described and more lovely than an artist's dream.

Here at an eddying pool in a sharp turn in the river, where the dark green waters gurgle enchanting songs to the quacking magpie on the tall cottonwood above, or there just below the singing white-capped ripples, can be seen the wily angler throwing his fly out and bringing in the speckled mountain trout or silver-sided graylings as fast as he can string them. There seems to be no end to the fish in this enchanting stream. At six in the morning, or again towards evening, one can see the speckled beauties jumping or scudding through the water in every direction searching for food, and it is nothing uncommon for a piscatorial wanderer to bring in thirty to fifty pounds of trout after a two-hours' angling. And all this lovely scenery and rich sport is within an hour's ride on horse-back from Livingston. In fact, plenty of trout can be caught at the bridge below the town, or within five minutes' walk up or down the river. I am told that before the river broke up men were making five dollars to six dollars a day by fishing trout through holes cut in the ice.

At a point five or six miles up the cañon there is a place for refreshments, and with guns and fishing rods we put in a most enjoyable afternoon, returning at sunset with fish enough for a good supper for the whole party at the hotel, and cooked as they were, just fresh from the river, they made a repast for a hungry, happy crowd which will long be remembered.

AN UNFAVORABLE VIEW OF MANITOBA.

The following is a picture drawn of Manitoba by a correspondent of the *American Settler*, an able journal published in London, England, and which was recently endorsed by being published in the editorial columns of the *Winnipeg Times*: "I do not consider Manitoba a good place for Americans. The people, the customs, the public spirit, all are so much different from the existing condition in the States, that an American, under the most favorable circumstances, feels under restraint. The people are singularly loyal to ancient Anglo-Canadian traditions, and naturally ape the manners of their English and Canadian fellow citizens of the old established communities. The result, as seen in Winnipeg, is in some instances very droll. I do not recall a place where one may find more tenuous dignitaries. Official life is instinct with people who 'crook the supple hinges of the knee, that thrift may follow fawning.' Red tape in the custom house and other government offices confronts one at every turn, and the charming repose of the clerks and officials is something that no word can portray. What is true of official life is equally true of certain mercantile pursuits, and particularly true of the learned professions. In the words of a plain Minnesota man who visited Winnipeg recently: 'A man must go in on a saddle horse to see one of these Canuck officials.'

THERE will be quite a boom in wool growing throughout northern Montana the present season. A prominent wool grower said, yesterday, in a conversation on the subject, that at least twice as much capital would be invested in sheep this year in the country tributary to Benton as has been any former year, and even more if the sheep can be secured. At least 1,000 head of thoroughbreds and good grades will be shipped to Benton by the boats, and they will find a ready sale, as there is a disposition manifested on the part of growers to introduce good blood in their brands. The same gentleman is our authority for the statement that there will be more wool brought into Benton this year than ever before.—*Benton River Press*.

PROGRESS OF THE NORTHERN PACIFIC.

Interesting Facts from a Recent Report of Vice-President Oakes.

From a report presented to the March meeting of the Board of Directors of the Northern Pacific Company, by Vice-President T. F. Oakes, the following statements in relation to the condition and progress of the road is condensed:

The winter in the Northwest this year has been of unusual severity, especially in Dakota. At times the trains have, in consequence, been somewhat delayed, never, however, exceeding twenty-four hours, and then only on one occasion; while sections of the roads south of the Northern Pacific in Dakota have been practically abandoned during January and February. The weather since February has been favorable, the ice in the Yellowstone breaking up and disappearing, with daily indications that the ice in the Missouri will now break up, having already begun to break and move in the Upper Missouri, Hart, Sweet Brier and other tributaries.

The outlook for traffic and travel this season between St. Paul, the Great Lakes, and Minnesota, Dakota and Montana, is very encouraging. The tide of emigration has kept up remarkably well, even during the most severe weather, as evidenced by the handsome increase in land sales compared with the winter months of the previous year. The immigration thus far in March is nearly double that of like period of last year.

Advices from our European Agency state that the emigration this year will be large, and destined principally to the Northwestern States and Territories.

The end of track being now Bozeman (seven miles beyond), we are within easy reach of the mines in the vicinity of Virginia City, and east and south of Helena, and it is expected the shipments of ore and matte heretofore transported by other routes will become immediately a large source of revenue to the company.

ON THE PACIFIC SIDE.

In consequence of an exceptionally sudden change to warm weather, the heavy and unusual accumulation of snow on the Pend d'Oreille Division melted too rapidly to be carried off by the water-courses and culverts, causing numerous washouts between Ainsworth and Bluff Wells miles, the track between those points being more or less damaged, and business suspended for some days. The track, however, is now in order, and trains running on time.

Advices from San Francisco are to the effect that the Spring business has opened in earnest, and the steamers to Portland and Puget Sound points are crowded with passengers and freight. The offerings of freight are so far beyond the present capacity of the steamships, it is proposed to run a ship every three days, instead of every four days, as heretofore.

The business on the Pacific Division is improving generally. At the coal mines at Carbonado the output in February was 9,846 tons of coal, being an excess of 746 tons over the tonnage the Central Pacific agreed to furnish.

CONSTRUCTION.

Track laying during the winter has not progressed to the extent hoped for, by reason of the extreme severity of the weather. Work upon the grade and tunnels has, however, gone on satisfactorily. On the Clark's Fork Division heavy snows have yet to melt, and there may be some temporary delay in bridging and track laying when the snow and frost disappear; but such interruption will be of short duration.

The Missoula Division is in good shape for active work when fairly reached. The Rocky Mountain Division is practically graded. General Anderson has made contracts for laying track from both ends of the gap as rapidly as practicable, taking off on the west end the forces heretofore worked by the company.

The track is now built seven miles beyond Bozeman, on the East Division, and at the 350th mile-post east of Wallula, on the Western Division. This leaves a gap just 283 miles. From the east end the contractors will lay not less than one mile per day for the next ninety days, and equally favorable showing from the west is looked for after the 1st of April.

Application has been made to the Government for the appointment of commissioners to inspect fifty miles on the eastern end and twenty-five miles on the western end, now ready for examination.

General Anderson has contracted, on behalf of the Oregon and Transcontinental Company, for the construction of the Yellowstone Branch from Livingston to the northern boundary of the Park, a distance of about sixty-five miles. The work is mostly of a light character, and should be completed by the end of July.

IMMIGRATION.

From the Walla Walla Statesman.

Present indications are that the tide of immigration into Washington Territory will be much greater this year than it was last, with the prospect of a larger proportion from the East than in former years. The latest weather reports from England indicate that there will be a good many people who will get out of the country if they can. A good season last year afforded farmers some relief, but the present year opens with the same complaints as in the three preceding years. The London *Times* says it is water everywhere. Continuous rains prevent sowing, and grain put in the ground early is believed to be rotten. Another comparative failure in crops will give an impetus to immigration. Farmers will look for land where more than one year in four is remunerative. Low fares will help to swell the tide, and to scatter new comers over a wide expanse of territory. The people of the United States will welcome these immigrants, and give them a chance to build up homes. We have still vacant lands belonging to the Government, and it is for the interest of the great railroad corporations who have acquired so many millions of acres to dispose of lands on easy terms. But with a population of more than 50,000,000 we do not feel that eagerness to stimulate immigration from Europe we did at one time. We have still room, but the increase of the native population is peopling the remote localities so rapidly that the help of immigrants does not seem indispensable. In California and the Pacific Coast Territories there is room for many millions of people, but they will come in time from the thickly settled Atlantic States. The restriction placed on Chinese immigration opens this coast to Eastern and European immigrants, and many of them will locate in our Territory. Our wheat exports this year will exceed any former yearly shipments, and next season, with a fair crop, the yield will be double that of the coming harvest.

SUPERINTENDENT ODELL'S PROMOTION.

From the Bismarck Tribune.

It is with pleasure the *Tribune* announces the promotion of Superintendent Odell, of the Dakota Division, to Assistant General Manager of the North Pacific. Although Mr. Odell has been an officer of the road less than a year as Division Superintendent, his friends are legion. His management of the Dakota Division, the most important one on the line, has been such as to call forth the loudest praise. He has shown his ability as a "snow-bucker," for while other roads in the Territory have been blockaded this winter for weeks at a time, trains on the North Pacific have run—on the Dakota Division—with unerring regularity. Delays of a few hours at Bismarck have been quite frequent, but the trouble has been on the Minnesota Division. Few trains have been late at Bismarck that have not been late at Fargo, where Mr. Odell's jurisdiction begins. He has made the best officer the North Pacific ever had, which is saying much, as Mr. Taylor, of the Missouri Division, has filled his position well. The people all along the line will be glad to learn of Mr. Odell's promotion, which takes place April 1st.

The price of logs is going up gradually on Puget Sound. In 1879 mill men paid \$3.50 per thousand feet for logs, now they pay just twice as much. The price will probably keep going up, as the demand for lumber is good all over the world.

THE CITY OF TACOMA.

Tacoma, the terminus of the Northern Pacific Railroad on Puget Sound, is fast emerging from the village condition and assuming the proportions of a large town. The selling value of unimproved property has doubled since last fall, and so great is the demand for lots, that the Company which owns the town site is now declining to sell to parties who wish to buy for speculative purposes, and insisting, in its contracts, on the erection of buildings. Nearly a hundred new structures are now going up, and the demand for mechanics' labor is greater than the supply. Gas and water works are to be established, and a fine hotel will be built this season, which will at once command a large business outside of the usual traveling patronage, as a summer resort and a place of rendezvous for tourists on their way to the many beautiful places on the Sound, and to the snow fields and glaciers of Mount Tacoma.

We have received a number of letters of late asking questions about Tacoma, its situation, its climate, its transportation advantages and its probable future, and will try to reply here briefly to all these inquiries.

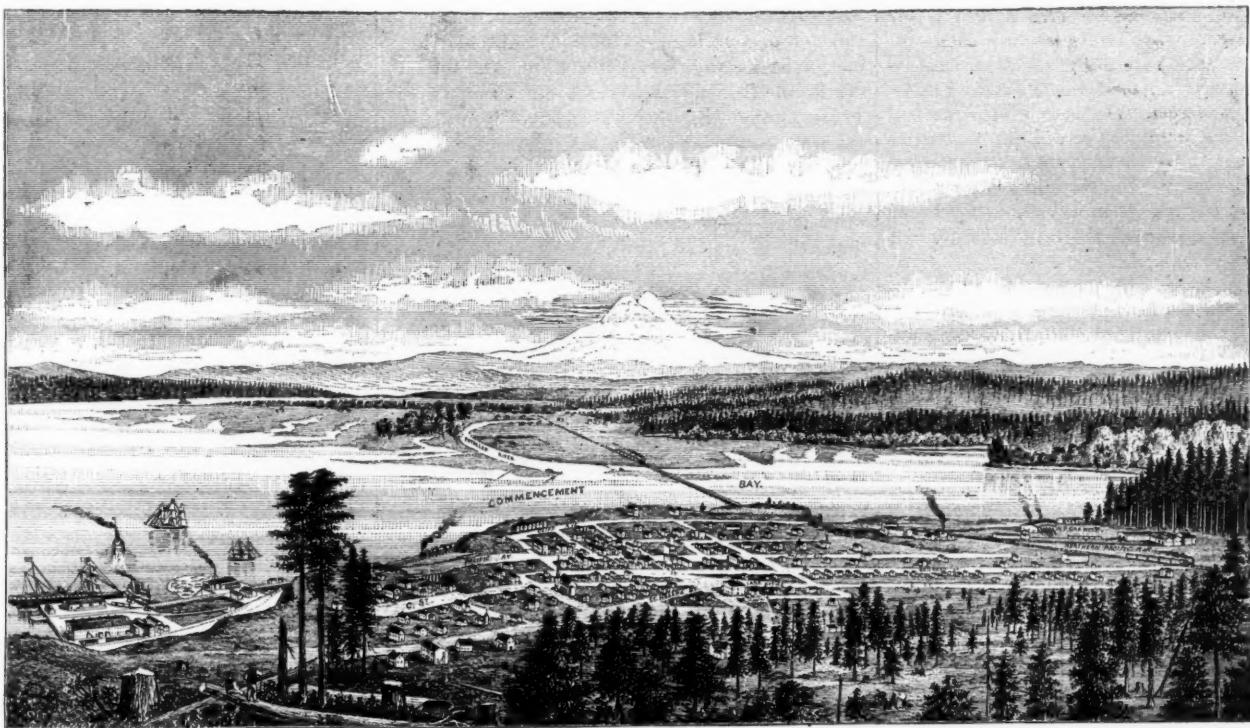
line of steamers runs regularly to San Francisco and numerous steamboats give daily communication with Olympia, Seattle, Port Townsend, and all other points on the sound, as well as with Victoria, on Vancouver's Island, the handsome capital of British Columbia. The agricultural lands near Tacoma produce good crops of small grains and vegetables. Of late, the farmers have been making a good deal of money from the cultivation of hops.

The climate of Tacoma is delightful in the summers and falls, the combination of sea and mountain air producing a strengthening and invigorating atmosphere. The springs are about as early as in the latitude of Pennsylvania. In winter there is little snow, but a great deal of fog and rain, the season resembling closely that of Ireland and the west of England. What is called extreme cold in the East is unknown. The scenery around the town, made up of broad, blue stretches of sea water and dark green expanses of forest, rising on the western horizon to the gigantic peak of Mount Tacoma, the monarch of the Cascade Range, has elements of remarkable beauty and grandeur, and is a constant source of pleasure to the dwellers in the place. The population is now something over 3,000,

A FAR-WESTERN CITY.

Correspondence of the Philadelphia Press.

TACOMA, W. T., March 19th.—The near approach of the completion of the Northern Pacific Railroad has given a new impetus to business in this new city, which is the western terminus of the road. As long ago as September, 1873, Tacoma was selected by the Directors of the road as the terminus on the Pacific by formal resolution, which was confirmed by the filing of maps in the Interior Department at Washington, on which the land grants to the road are based. The selection was made only after the most careful surveys of one hundred miles on Puget Sound, and Tacoma was agreed upon chiefly because of its excellent harbor, which is one of the finest in the world. A natural barrier protects ships from the winds of the sea, and the "Great Eastern" could lie alongside the piers of the Northern Pacific Railroad Company, and there would be several fathoms of water under her keel. This great advantage in safe water communication over other points was sufficient to have made Tacoma a leading port, but there are other reasons why the Northern Pacific Company did wisely in making it the western terminus. It



VIEW OF THE CITY OF TACOMA.

Tacoma is situated on a high plateau at the head of Commencement Bay, on Admiralty Inlet, which, with its connecting waters, is commonly called Puget Sound, in Washington Territory. The distance to the sea by way of Admiralty Inlet and the Strait of Juan de Fuca is about 160 miles. Ocean steamers of the largest tonnage can come up to the wharves of the town. Indeed, on Puget Sound the difficulty is to find shallow water for convenient anchorage, rather than deep water for heavy ships. Tacoma has what is called a good anchorage ground. The railroad company is now erecting a grain elevator and extensive coal bunkers, and has ample wharf facilities. With the completion of the Portland-Kalama link of the Northern Pacific system the coming summer, wheat will be hauled to Tacoma from the grain belt of eastern Oregon and eastern Washington without breaking bulk, and shipped direct to Liverpool. The coal fields of the Puyallup Valley lie about thirty miles east of Tacoma, on the Cascade Branch of the Northern Pacific Railroad. These fields are of great extent, and the recent examinations made by Prof. Pumelly's Northern Transcontinental Survey show that the best veins have not yet been opened. The coal is shipped from Tacoma to San Francisco. An extensive lumber business is also done—old Tacoma, the saw mill village a mile from the town, having one of the largest mills on the Sound. A

and whatever may be the solution of the vexatious question of where the ultimate Puget Sound metropolis is to be, cannot fail to increase very rapidly. The present season will probably double the number of inhabitants last reported. As a place of healthful and agreeable abode, and of excellent openings for industry, business talent and capital, we can unreservedly commend Tacoma to all who want to go as far west as the Pacific Coast.

THE Ashland Press, speaking of the progress of the surveys on the extension of the Wisconsin Division of the Northern Pacific Railroad, says that the locating party is expected at that place early in April. Ashland is on Lake Superior, and the building of the road to that point will give the N. P. Company three lake harbors, Duluth, Superior and Ashland.

It is estimated that Washington Territory will, this year, send abroad 355,000,000 feet of lumber, 200,000 tons of coal, 200,000 pounds of hops, 200,000 cans of salmon, 5,000,000 bushels of wheat, 3,000,000 bushels of oats, 100,000 bushels of potatoes, and 2,500,000 pounds of wool. In cargoes of 1,500 tons each this quantity of produce will load over 900 large ships, or three every day of the year except Sundays.

is at the end of the Puyallup Valley, a rich agricultural region, which, sparsely settled as it is, does a large business with the outside world. Sixty farmers raised hops last year on an average of ten acres each, and they sent to market over 1,000,000 pounds, which netted them \$400,000. The great wheat valleys of the Stuck and White Rivers are closely connected with Tacoma, and are destined to support a large agricultural population, whose products will be loaded direct on ships from the elevators here. The whole region of country north, south and east is heavily timbered, and already the whir of the circular saw is heard in the virgin forest, and the products of the mills are shipped to ports in various parts of the world.

Within ten miles of the city and from that to thirty miles distant is the most extensive field of bituminous coal west of the Rocky Mountains. A number of mines have already been opened and coal bunkers of great capacity have been built by the railroad company. As an illustration of the amount of this business, it may be said that the Central Pacific Railroad Company, which owns much coal land, has made arrangements to ship 200 tons per day from Tacoma by a fleet of new collier steamers to San Francisco.

A COLONY of 150 is going to North Dakota from Corry, Pa., this spring.

The Northwest.

A Monthly Journal, devoted to the development of the New Northwestern States and Territories.

[Registered at the Post Office as Second Class Matter.]

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ISSUE LETTERS OF CREDIT FOR FOREIGN TRAVEL,

RECEIVE THE ACCOUNTS OF DOMESTIC AND

FOREIGN BANKERS, MERCHANTS

AND CORPORATIONS.

NEW YORK, APRIL, 1883.

THERE was very little snow in March on the Upper Yellowstone, and buildings are reported to be going up rapidly in Billings and Livingston.

As early as March 1st spring wheat was sown near Benton, Montana, on the Upper Missouri, in latitude 47°. How is that for a region once supposed to be hyperborean in its climate?

An important line of local railroad will be opened this season from Sanborn, Dakota, on the Northern Pacific main line, north to Cooperstown, the county-seat of Griggs County, a distance of about thirty miles. This line will give convenient transportation to a very rich section already fairly well settled. Cooperstown has now a population of over 600, and counts confidently on a rapid growth this year. Judging from the appearance of the local newspaper, the *Courier*, it is inhabited by a class of people whose enterprise rather exceeds the high Dakota average.

We learn from the reports furnished by the Land Department of the Northern Pacific R. R. Co., that the sales of town lots in Livingston for the month of February, 1883, amounted to \$54,760, and that the total sales, since the town was platted in December last to February 28th, inclusive, foot up \$93,020. This is the largest amount ever realized by the Company, in three months, from any town on the line.

THE total number of letters mailed in Montana during the year covered by the last report of the Postmaster-General was 1,576,224; the average for every man, woman and child in the Territory being 40.25. With the exception of Colorado, the District of Columbia and New York, the number per capita is larger in Montana than in any other State or Territory—a fact which might well enlighten the ignorance of some Eastern folks who imagine that the far West is inhabited by rude, semi-barbarous people.

A SERIES of letters from the editor of THE NORTHWEST, describing the condition, prospects and recent development of the entire northern belt of States and Territories from Wisconsin to the Pacific Ocean, will begin in our May number. These letters will give the freshest information available concerning the most interesting region of country on the American continent now inviting emigration and business enterprise. They will comprise accurate accounts of farming operations, the growth of towns, the extension of transportation lines, the opening of mines, the fisheries and lumber trade, the newly discovered coal fields, and the attractions of the plains, mountains, rivers, lakes and tidal inlets of the far West for tourists, sportsmen and health seekers.

THE YELLOWSTONE PARK LEASE.

As finally executed by the Secretary of the Interior, the lease of parts of the Yellowstone National Park to the Hatch-Douglass syndicate for hotel purposes appears unobjectionable. The opposition manifested in the press and in Congress to giving the company monopoly privileges, and to allowing it to enclose large tracts near the principal points of interest has been respected, and the new contract limits the concessions of the company as closely as could well be done, if the main purpose of the lease—namely, the providing of hotel accommodations for tourists—is to be secured.

The ground leased includes ten acres in different parts of the reservation, carefully specified in the lease, outside of and a considerable distance from any of the natural wonders. The company undertakes to make certain stipulated improvements, to erect a hotel with accommodations for 200 guests, with necessary attachments and apparatus to secure the comfort of visitors. There is no stipulation for transportation facilities, but probably these may be provided under the general terms of the lease. There are careful prohibitions and stipulations to prevent extortion, injury to the park, or injury to the rights of the Government as original and only proprietor of the ground. All schedules of charges must be submitted to the Secretary of the Interior for his approval; any rules and regulations established by him must be obeyed; the lessees are forbidden to injure or destroy game or natural curiosities, or to exclude the public from the enjoyment of them, or to remove or sell any valuable mineral products. They may be summarily expelled upon any violation of the terms of the lease. The rental is nominal, only \$2 per acre,

and the lease runs ten years unless sooner terminated.

Tourists will be glad to learn that a hotel will be put up in the Park at once, and will be ready for occupancy in June. The route to the Park is by way of Livingston, on the Northern Pacific Road. Stages will run from that point to the hotel until the N. P. branch line is opened. This line is now under contract, and is to be completed by July 1st.

A NEW WESTERN DAKOTA TOWN.

Belfield, formerly called Houston, on the Northern Pacific main line, in western Dakota, has recently come into the hands of a wealthy syndicate of Chicago parties who have purchased of the railroad company 10,000 acres adjoining the town site, and are settling up the adjacent country with an industrious class of farmers, principally from northern Illinois. The erection of buildings in the town is being pushed forward with considerable energy, and a prosperous future may be predicted for this new community. Belfield is situated in the region sometimes termed "Summer Valley." The Heart River, a graceful stream bordered by trees, runs directly through the town. Grain and vegetable crops of all kinds are produced here in abundance, and an agreeable climate, a fertile soil, good pastures for cattle grazing, together with a beautiful location, combine to make Belfield a desirable point for colonists. A banking company has already been formed, and it is proposed to erect a flouring mill, a grain elevator and a fine hotel. Excellent clay for brick-making purposes can be obtained in the immediate vicinity, and a brick yard has been established. The lignite or soft coal, which underlies this whole section, will furnish plenty of fuel to the settlers. Game in abundance is to be found in the vicinity. Belfield hopes to be the county-seat of Billings County. Its settlers believe it is the best terminus for a future railway running to the Black Hills. Few places have started under more favorable auspices, and it will undoubtedly secure a fair share of the enormous emigration which is now going into Dakota.

SILVER IN THE KOOTENAI COUNTRY.

Many enthusiastic reports are current in Montana and British Columbia about the discovery of ledges of rich silver ore in the Kootenai country. A recent Victoria dispatch says: "A prospector just returned from Kootenai District brings specimens of lead and silver ore of marvelous richness and nearly pure. He says the mines are of vast extent, and it is estimated that in one location there are 250,000 tons of ore in sight. The value of the mines at present discovered is \$50,000,000. One seam is 100 feet thick. He tells of great veins of pure copper visible in the hill-sides. These mines are within sixty miles of the route selected by the Canadian Pacific Railway, via Kicking Horse Pass." This piece of news is headed in the Deer Lodge *New Northwest*, "Does the Prospector own a Toll Road or a Ferry?"

That there are valuable silver deposits on the Kootenai River we have no doubt. Last fall Mr. C. J. Woodbury, whose letters to the New York *Evening Post* have been copied in these columns, crossed on the trail from Lake Pend d'Oreille to the Kootenai and descended the river a hundred miles in a boat. He and his companions located claims of a very promising character. The region is entirely wild, and cannot readily be reached until a road is cut across the forests from Sand Point, on the Northern Pacific Railroad.

OREGON AND CALIFORNIA R. R.

We print on another page the terms of the agreement recently completed, under which the Oregon and California Railroad is to be leased for 999 years to the Oregon Transcontinental Company. This arrangement brings the O. and C. lines into still closer alliance with the Northern Pacific system. The Oregon Transcontinental Company, as is well known, already holds a controlling interest in the Northern Pacific and the Oregon Railway and Navigation Companies. The perpetual lease of the Oregon and California Road completes its control of the entire vast railroad system represented by the main line of the Northern Pacific, its various branches built, and to be built, in Minnesota, Dakota, Montana, Oregon and Washington Territory, as well as every other existing railroad line in Oregon and Washington Territory.

The Oregon and California main line, upon the completion of the southern extension, will extend from Portland, Oregon, to the California boundary, and form, with the Central Pacific lines in the Sacramento Valley, and the lines of the Northern Pacific Road, west and north of Portland, a continuous line from San Francisco to Puget Sound, representing a total length of nearly 1,000 miles.

The O. and C. drains the whole of the fertile valley of the Willamette, already well settled and dotted with prosperous towns. Further south it traverses the smaller valleys of the Umpqua and Rogue Rivers, which enjoy a rich soil, scenery of unusual beauty, and a climate of peculiar mildness.

The extension of the road over the mountains to the California line, where it meets the California and Oregon Branch of the Central Pacific system, is being rapidly pushed. To settlers who want to go as far as the Pacific Coast, the valleys of southern Oregon, now being opened by the O. and C. road, present many special attractions. The soil is productive; there is good pasturage on the mountain slopes; excellent timber abounds; the streams are plentiful and their waters clear and cool; and the winters are as mild as those of Italy, while the summers are no warmer than those of Massachusetts.

THE RAILROAD REACHES BOZEMAN.

The handsome and prosperous town of Bozeman, Montana, celebrated the greatest event in its history on March 21st—the arrival of the first train on the Northern Pacific Railroad. The motto for the occasion was "Blest be the tie that binds," and the ceremonies consisted of a procession, an artillery salute, bell ringing and an oration by Hon. H. N. Maguire. The troops from the neighboring fort took part in the procession, and there were also a number of the survivors of the heroic Yellowstone Expedition of 1874, whose brave deeds and sufferings, in a running fight of many days with the Indians, form the most thrilling chapter in the early history of Montana.

Under the impetus of the near approach of the track of the Northern Pacific road, Bozeman has doubled its population during the past year. It now counts 3,000 inhabitants, and looks forward confidently to a large further growth the coming season. As a location for enterprising men of business, desirous of engaging in trade or manufacturing in the Northwest, it can hardly be surpassed. The place is well built, and has an orderly, intelligent population. Many of the buildings are of brick, and the court house and

school house would do credit to any town of its size in the East. The surrounding country has a good soil, which is made exceedingly productive by irrigation; and this method of farming is made easy and inexpensive by numerous streams running through the valley to the Gallatin and West Gallatin Rivers, their channels full fed all summer by the springs and melting snows in the mountains. The scenery is inspiring, the air wonderfully pure and enchanting, and the climate healthful.

THE purchase by the Northern Pacific Railroad Company of a large tract of land for terminal facilities in the northern suburbs of St. Paul, and nearly midway between the present business centre of that city and the eastern wards of Minneapolis, is likely to exercise an important influence on the direction of growth of both those thriving places. Far-sighted men begin to recognize the fact that they are soon to approach each other and become substantially one metropolis, and in view of this prospect the local jealousies which have agitated them in the past are fading away. We know of no parallel case to the development of these two spirited, energetic and handsome cities, scarcely ten miles of country separating them, and each having all urban facilities and conveniences of numerous railway lines, hotels, banks, newspapers, theatres, wholesale stores, etc. One depends chiefly on trade and transportation, the other on manufacturing; but neither is deficient in any of the features of a true business centre. Their union by growth towards each other, and around the newly selected railroad terminus, will make a third great Western metropolis rivalling at no distant day the cities of Chicago and St. Louis.

Now that the non-action of Congress on the bills for dividing and admitting Dakota has thrown the whole question over to next winter, would it not be well for the people of the Territory to take it up for fresh discussion, with a view of creating a united and powerful public sentiment and bringing it to bear at Washington during the next session? To this end we would suggest a convention of delegates from all the counties in the Territory, to be held after harvest, at the most accessible point affording sufficient hotel accommodations. At such a convention the question of division could be freely discussed in all its bearings. There is much to be said on both sides. As one great State, Dakota would wield an immense influence in national politics, and her citizens would enjoy the same feeling of pride over the vastness of their domain and the magnitude of their resources which characterizes Texans. On the other hand, freedom from sectional jealousy and strife would be best obtained by dividing the Territory, and experience in the East shows that economical and efficient government is more easily obtained in small States than in large ones. If the sentiment of the Territory is, as we believe, almost unanimous for division, a convention would crystallize and give it force.

An Ottawa news item says: "Negotiations between the two companies projecting railways to Hudson's Bay have now progressed so far as to enable a definite proposition to be passed between them. These are now under favorable consideration, and there is little reason to doubt that they will lead to an amalgamation. An act of Parliament will be necessary to secure an amalgamation of stock, and to provide for a joint directorate composed of members of both companies, seeing that this latter could not be accomplished without motions of stockholders of the two companies."

QUESTIONS AND ANSWERS.

[In this Department the Editor will endeavor to answer briefly all inquiries concerning the Northwestern country, openings for settlement and new enterprises, promising investments for capital, railroad securities, etc.]

A Printer's Question.

A subscriber in a central New York town writes: "There are three brothers of us, all printers. I am the oldest, 45 years. We all have families—children, mainly girls. We are all workers, were 'brought up' on a farm, but wish to turn our knowledge of printing to account, if possible, in the West, in connection with agricultural labor. We can, combined, control \$2,000 or \$3,000. Can you advise me as to the best locality for parties, situated as we are, to go to? We wish to get out of doors, and want only so much land as we can cultivate."

The best way would be to go out into the Northwest yourself, and look about for a few weeks to find a satisfactory location. If we were to name a place in Dakota where there will soon grow up a town that will support a paper, and where land is now very cheap, we would say, either the point where the Jamestown Northern Railroad will reach Devil's Lake next June, or perhaps Lamoure, where the Fargo and Southwestern Railroad crosses the James River, or possibly one of the new towns in the Heart River Valley, west of Mandan.

Value of N. P. Dividend Scrip.

CROOKED CREEK, IND., Feb. 26th, 1883.

To the Editor of The Northwest:

Will you tell me through your paper the market value—buying and selling—of the fractional scrip in sums less than one thousand dollars of the dividend on the Preferred Stock of the N. P. R. R.? and also the address of any person dealing in it?

E. C.

The scrip sells for about ninety. Write to any of the banking houses who advertise in our columns.

Taxation of N. P. Stock.

WELLS, VT., March 10th, 1883.

To the Editor of The Northwest:

I wish you would answer the following questions:

- (1) In what way is the stock of the N. P. R. R. taxed?
- (2) Is it exempt by laws of the United States? D. S. P.
- (1) Yes, like any other railroad securities. (2) No.

About Washington Territory.

CINCINNATI, March 10th, 1883.

To the Editor of The Northwest:

Having a strong desire to locate in Washington Territory, I wish to get some information as to climate, business prospects, etc.

There are two widely diverse kinds of climate in Washington, the Cascade Mountains being the dividing line. West of the Cascade Range the winters are rainy, rather than cold. The average temperature for spring is 52°; for summer, 67°; for autumn, 53°, and for winter, 38°, showing a mean deviation of only 29° during the year. The winter or rainy season begins about the middle of October, often later, and ends about the 1st of May. The rains are more copious in December, January and March. At the beginning and end of the wet season the rain is usually in showers, with many intervals of bright weather. Snow sometimes falls, but speedily disappears. Thunder storms are exceedingly rare; hail storms, hurricanes, earthquakes and other destructive phenomena are scarcely known. Since the settlement of the country by white men, beginning with Lewis and Clarke's expedition, in the early part of the century, no storm has done material damage in the region west of the Rocky Mountains, north of California. From April to October the weather is delightful. There are showers from time to time, but vegetation is kept fresh by the night dews and occasional morning fogs. July is the hottest month; but the days are tempered by sea breezes, and the nights are cool. East of the Cascade Mountains the thermometer is much higher in summer and lower in winter than in the western section. The rain-fall is only half as heavy. From June to September there is no rain, the weather being perfect for harvesting. The heat is great, but not nearly so oppressive as a much lower grade would be in the Eastern States, and the nights are invariably cool. The winters are short, but occasionally severe. Snow

seldom falls before Christmas, and sometimes lies from four to six weeks, but usually disappears in a few days. The so-called "Chinook," a warm wind, is of great benefit to the country; it blows periodically and melts deep snows in the course of a few hours. This warm atmosphere is caused by the passage of the wind across the Japan current. In eastern Washington spring begins in February, with warm, pleasant weather, and lasts until the middle of May. At this season rain falls in sufficient quantity to give life to vegetation and ensure good crops. The average temperature is 52°. Business opportunities are good in both sections, as in all new regions of the Northwest, which are fast filling up with settlers.

STOCK RAISING IN MONTANA.

From the Billings Post.

The annual increase realized from a herd of cows is about eighty-five per cent., but this percentage might be considerably increased by better attention. The gross annual loss from all causes for the last three years, on the Yellowstone Range, has amounted to twelve per cent. But this average includes the winter of three years ago, when, owing to an extraordinary combination of circumstances, fully thirty per cent. of the cattle died from starvation and exposure. For a month snow fell at short intervals, and thawed sufficiently as it fell to settle it into a compact mass. At the end of that time it turned very cold and so remained for six weeks. As the consequence the ranges were covered to the depth of a foot with a series of almost impenetrable crusts, which converted the comparatively easy task of feeding, so long as the snow remained soft, into a veritable struggle for existence, from which the fittest only survived. Aside from that one winter, the conditions of which, judging from long experience in the older portions of Montana, are not likely to be repeated for many years, the greatest foe of the stock grower has thus far been the poisonous larkspur, which, happily, is confined principally to the neighborhood of the mountains.

Under this system, the average cost of raising a steer from calfhood to the age of three or four years is but \$2; and this trifling expense is principally for branding when a calf. Branding has to be done but once. Brood cows are worth \$35 per head, and steers \$50 on the range, by the herd. Dairy cows command from \$50 to \$60 per head. The herds of fat cattle shipped from Billings to Chicago last fall brought an average of \$80 per head in Chicago. One herd averaged over \$85 per head. The three-year-old steer, as he leaves the range, averages 1,100 pounds weight, and the four-year-old 1,400 pounds. The expense of transportation from Billings to Chicago is \$10 to \$12 per head.

Montana beef possesses a superiority of flavor which has already secured recognition in Eastern markets. In Chicago, it is said, it is regularly quoted at from half a cent to a cent per pound higher than other beef. This superior excellence of flavor is by experts attributed to the quality of our grasses and to the alternations in temperature of our climate. The theory is that an equable climate like that of Texas cannot produce the best quality of beef.

MEDICAL LAKE, WASHINGTON TERRITORY.

The value of Medical Lake as a health resort has been thoroughly established, and all that is now necessary to make it the most popular resort on the Pacific Coast is that suitable accommodations be provided. The place needs to be ornamented with trees, shrubbery, walks, drives, etc., so that persons coming here can take some pleasure in the surroundings. A bath house with elegantly furnished parlors, carpeted dressing rooms and porcelain tubs are also a necessity. The thing most needed, however, is suitable hotel accommodations. A large hotel with a number of good rooms, and run in first-class style, would be a very paying investment. While there is every advantage here, yet the place will not, of itself, become a town. Suitable accommodations must be provided before business can be expected. The business of the place has been far beyond its hotel and bathing capacity, and it would be multiplied if suitable improvements were made.—*Medical Lake Press.*

ABOUT THE NORTHERN PACIFIC.

From the St. Paul Pioneer Press.

Gen. A. Anderson, Chief Engineer of the Northern Pacific, is in the city, and confirms all that has been stated hitherto regarding the early completion of the road.

"What arrangements have been made for business at the western terminus?" he was asked. In response General Anderson stated "that contracts had been made for depot buildings, a grand hotel and extensive shops, the construction and equipment of which would involve vast outlays of money. Of these, the hotel only would be completed by the time the road was opened for business; the remaining improvements would hardly be finished within that time. With regard to direct communication with San Francisco, he said that this would be attained by a road in process of construction from Portland to the California State line, which would be completed within a year, and then connect with a branch of the Central Pacific, which was now building up the western coast of California from Sacramento. The shipments, hence, would be made up of wheat from Washington Territory and sea products of the Pacific Coast."

"How about the India trade?"

"In the India trade ships now aim to sail the great circle, as it is called, which brings them nearer Puget Sound than San Francisco, and I have an idea that Puget Sound will ultimately become the great entrepot for East India trade. The harbor there is not excelled by any in the world, and when the forty miles of road remaining to be built to connect Portland and Puget Sound is completed, the tendency of trade from the East Indies to this side of the Continent will be by that route. It is impossible, however, to say how the trade of San Francisco will be affected, or to what extent business will be drawn from the Union and Central Pacific roads, when the Northern Pacific is completed. This is not necessary, though, for it will have a large local business of a definite and steady kind. Will it build up the Territories? Most emphatically it will build up Dakota, Montana and Washington, and make different countries of them. With reference to the character of the work on the western division, it was the most expensive of any on the road, heavy and troublesome. East of Montana it began to cheapen, and so continued as it progressed in this direction. Chinese labor he thought was not desirable except under certain conditions. It depended entirely on how they were handled, and, at best, they were worth only two-thirds the value of the average white man. One thing they easily acquired, he said, and that was how to 'sojor.' This they could and did engage in more rapidly than white men, and while white men would rather work than sit still, the Chinaman preferred sitting still to working. They were efficient in some respects; but, taken all in all, their work depended entirely on how they were managed. Do the people feel jubilant? Decidedly so. They feel now that they're going to get out of the wilderness. General Anderson stated further that an immense immigration would, in the opinion of those who presumed to know, come in this season and build up the waste places. At present the line of the road was settled, except about 180 miles, from a point ten miles north of Missoula to near Fort Cœur d'Alene, which was not settled at all. This was in part due to the fact that much of it was an Indian reservation. The balance of the country, however, was being rapidly distributed among farmers and stock raisers, whose houses had begun to dot the landscape at all points of the compass."

It is a little singular that a State which came into the Union with such extensive advertising and at such cost to the Government and to its original settlers as Kansas, should be the first Western State from which emigration has already begun to flow in such proportions as to be termed a hegira. Kansas is already doing more than any other State to populate Washington Territory, and a correspondent writes from old Mexico that there are at least 8,000 people from Kansas in the State of Chihuahua, and thousands of others are coming.—*Tacoma News.*

THE MAGINNIS MINES.

From the Miles City, Montana, Journal.

J. F. Cole and J. J. Delehanty, two of the most prominent mine owners in the Maginnis mining country, arrived here Wednesday, direct from the land of gold. They predict a large influx of miners this spring, and also a large outgrowth of rich ore. The Collar Mining Company have a forty-stamp mill now *en route* from Junction City to the mines. The Montana mine has now at work one large mill, from which good cleanings are made weekly. This spring and winter much good and substantial work has been done on the mines, and the camp now being over a year old, presents a very good appearance of continued prosperity. All the leads as they have been gone down on, show up much larger veins and prospect much better than near the surface. On the Nevada an assay went \$3,000 in silver and gold, the largest portion being gold, at only a distance of seventy feet. All the mines which have been worked show almost as good estimates, and a mining boom of no small dimensions will strike the camp this spring. The Spotted Horse have purchased a mill, and expect to have it out soon. Messrs. Cole and Delehanty go to Chicago and New York to meet some capitalists who are desirous of becoming interested in the property there.

NEW TERMINAL FACILITIES FOR THE N. P. R. R.

With the extension of the main line of the Northern Pacific Railroad, its terminal facilities at St. Paul and Minneapolis were found totally inadequate—hence, about a year and a half ago, a tract of land in Minneapolis of thirty acres was purchased. It is in a convenient position, accessible to the several roads centering at Minneapolis, as well as to the line of the Northern Pacific Railroad. At St. Paul, adjacent to the line of the St. Paul, Minneapolis and Manitoba Railway, fifty acres of land were purchased, upon which, in time, a large passenger depot will be erected and necessary passenger yard tracks provided, suitable for the accommodation of all railroads running in connection with the Northern Pacific; and at a point about one and a half miles from the business centre of St. Paul, near Lake Como, another tract of land was purchased, 200 acres in all, on which the freight transfer yards, machine and car shops, round houses, etc., will be erected. By these purchases the terminal facilities provided at both St. Paul and Minneapolis will be superior to those of any other roads centering at those points.—*N. Y. Evening Post.*

NORTHERN PACIFIC officials are quite happy over the fact that notwithstanding the blizzard weather in February, there was not a whole day of detention for any of their trains. Eastern people frequently imagine that because of snow storms in the Northwest and West, the winters are severe, yet in the case of the Northern Pacific, trains have run all the time, and in the severest weather were never more than seven hours late in a 1,000-mile trip; yet in more southern latitudes, popularly supposed to be free from storms, roads have been blockaded for days, notably in Iowa and Nebraska. The Northern Pacific has a fine winter record this season, and the trains have been most excellently managed by the operating department.—*St. Paul Pioneer Press.*

A TOWN in the Devil's Lake region, Dakota, has been named Jerusalem.

THE NEW BEDFORD man who fainted away out in Montana, was only brought out of the fit by placing a dead fish to his nose. As he slowly began to revive he murmured, "How good! it smells just like home!"

A COMIC COON.—A very colored man, who entered complaint against another for assaulting and battering him upon the head, was told by the justice: "I don't see any marks." "Does ye s'pose he hit me wid a piece of chalk?" was the indignant rejoinder. The case proceeded.—*Boston Herald.*

THE PARK REGION OF MINNESOTA.

From the Perham Bulletin.

Why is it that people will emigrate to Dakota—that they will pass through this “Garden of the World”—the Park Region of Minnesota, where we find all that nature does for the good of man in the handiwork already prepared for homes of mankind?

In this Park Region we find the best of soil, as shown by the fact proven by our assessment, that Otter Tail County gives the largest number of bushels of wheat per acre of any county of Minnesota, and that other crops are equally as good.

The past summer I harvested sound corn—sixty bushels of shelled corn per acre, and not a nubbin that was not sound. If the best and largest crops can be, and are, raised in this Park region, and we can have our homes in a land where one-fourth is a land of beautiful groves, and among these beautiful groves we find the lakes so combined as to make it a landscape of beauty, why should people pass by it for the broad-spread, wind-torn prairies of Dakota? Nowhere has nature prepared any land that, in its primitive state, before man has turned the sod, can be, in any fair comparison, said to be as beautiful as the Park Region. All the settler has to do to make it “outshine” in looks the oldest of the parks of our old countries, is to just cultivate the soil, put in the seeds, build his house and fences, for he has all the shadery, the lakes, and the terraced ground at hand; and if he will build the castles and other artificial surroundings, he may feel that he has at short notice all the good and beautiful of an old country of hundreds of years of improvements.

Nowhere can be found a land equal to that on the Northern Pacific Railroad between Verndale and Detroit, or Wadena and Fergus Falls, Minn., either in beauty or in the dollars it will return for an investment. And as to towns, I would say that Wadena and Perham now are the very foremost, and will grow this coming spring and summer more than any towns on this railroad.

People in the East are watching us, and only waiting until spring, when the rush will come; and they have learned that the “Land of the Dakotas” is a land of “boom,” gotten up by unprincipled town lot speculators, and that the report of crops of that far advertised prairie are so far from the truth as to be blank lies. Dakota and the Red River Valley are not what they are reported to be. They are good, we would not decry them, but they are boomed far beyond what is true. This is proved by the many who go by us to that boomed country, get their eyes opened and return to make a home in Otter Tail County.

OTTER TAIL.

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In Oregon they have a grade of wheat known as goose wheat. It is so called because the wheat grown in the State came from two or three grains taken from the craw of a wild goose. The wheat has a very hard, coarse shell, and makes a peculiar grade of flour. No wheat like it is known in this country. The people of Oregon have wondered from whence it came. The wonder is explained. From samples of foreign wheat at the Agricultural Department the exact duplicate of the goose wheat of Oregon has been found. This wheat comes from a small province in Spain, the only place where it has been grown. From that, one may safely surmise that the wild goose flies around the world in pretty fast time.

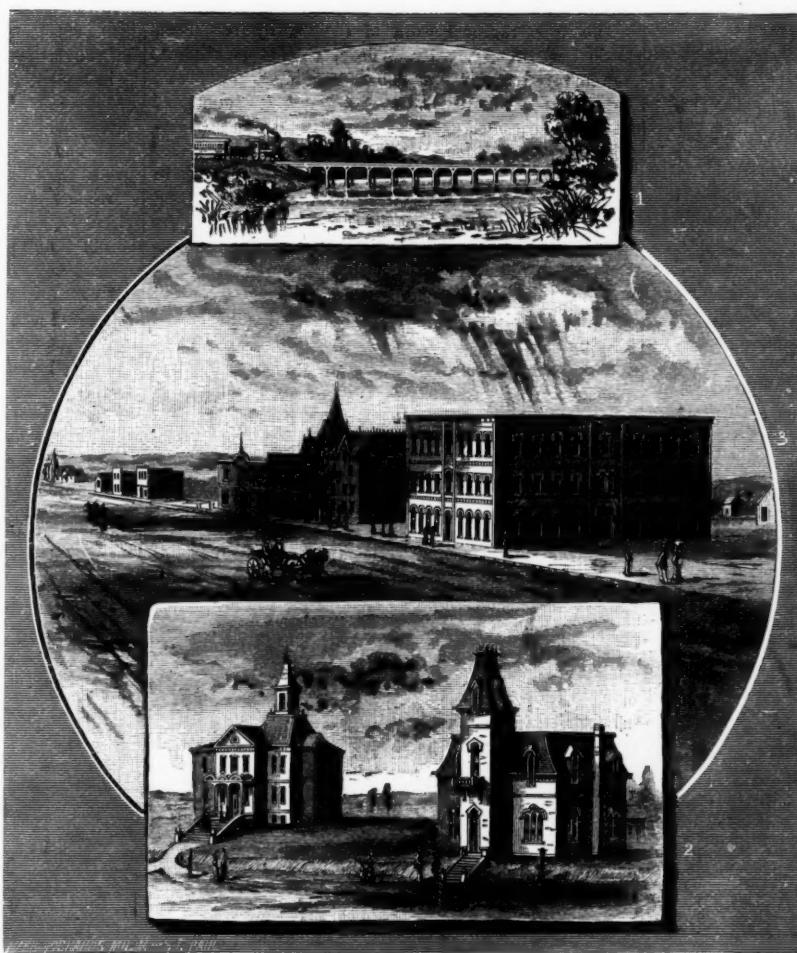
VALLEY CITY, DAKOTA.

This attractive town is situated fifty-eight miles west of Fargo. It is one of the prosperous places of North Dakota, and the county-seat of Barnes County, having tributary to it a well settled, rich agricultural country. The Northern Pacific Railroad Company have erected a fine depot on the line of the road at this point, at a cost of over \$8,000. Good brick business blocks, a high school building and tasty residences are characteristics of Valley City. The estimated population is 1,500. There are six churches, two built of brick and four of wood; three National banks built of brick; one frame and one brick school house; a brick court house, costing \$35,000; a brick jail, \$10,000; one large brick hotel just completed, costing over \$30,000; and two smaller ones of frame; one large brick opera house. The city has two brick yards and the output is about 20,000 a day.

Valley City is well supplied with lumber and coal

Estimated area under cultivation.....	125,000
Estimated area in wheat.....	90,000
Estimated yield per acre.....	22½
Estimated area in oats.....	15,000
Estimated yield per acre.....	55
Acreage of timber land.....	7,000
Bonded debt of county.....	\$20,000

The *Times* says: “Statistics heretofore published of improvements made during the past year, show an outlay of nearly \$215,000, and from present indications, the scarcity of business houses and private residences for rental (in fact, it may be stated truthfully that there are none unoccupied), the building operations next year, in order to adequately meet the demand, will no doubt be forty per cent. larger than during that just drawing to a close. Many other improvements have been made, which in briefest summary comprise a thorough system of sewerage, telephone exchange, the expenditure of over \$15,000 for street improvement and the completion of the new \$35,000 hotel, all of which, like facts above cited, mark an era of great progress. The receipts and shipments of wheat have also increased more than half since the season of 1882, showing that the growth of the city is not in advance of the country surrounding it, but of a most healthful kind; the receipts and shipments at the elevator for 1881 being in round numbers 104,000 bushels, and for the season of 1882, 268,000, making an increase of 164,000 bushels, more than the whole marketed crop of 1881, besides the many thousands of bushels received and ground at the Sheyenne roller mills of this city, and leaving out entirely mention of the unthreshed and unmarketed grain, estimated by dealers to be fully 175,000 bushels. As a natural consequence these conditions bring about a firm feeling in the real estate market, transactions being remarkably free for this period of the year. In proportion with the increase in other quarters, the mercantile business has also extended, and many new comers have driven their stakes and become members of the commercial circle. Business transactions cannot now be covered by less than \$900,000 per annum.



VIEWS IN VALLEY CITY, DAKOTA.

yards, and has two large flour mills, operated by power from the famous Cheyenne River; it also has a telephone system. Building is going on with great rapidity in every quarter of the city, mechanics getting from \$3 to \$3.50 per day. There are three papers published, namely: *Daily and Weekly Times* and *Barnes County Record*.

From a recent issue of the *Times* we copy the following statistics concerning Barnes County:

Estimated population.....	7,000
Total vote of 1882	1,342
Taxable valuation, 1882.....	\$1,400,000
Number of National banks.....	2
Number of private banks.....	2
Number of flouring mills.....	3
Number of church buildings.....	7
Cost of same.....	\$22,000
Number of school buildings.....	48
Cost of same.....	\$77,000
Number of public schools.....	48
Number of daily newspapers.....	1
Number of weekly newspapers.....	3

white, with a long shaggy coat, the base of which is like fur in firmness of texture. They have very deep shoulders, and at a distance, when moving, resemble an albino deer. They present a picturesque sight when standing out on a ledge of rock with a background of the same. They are larger than the ordinary domestic goat, and have a very dignified appearance, which is due to a decidedly thin whisker. It is thought there are some of these goats on the peaks near Livingston.

Livingston Tribune.

• • •

How some Montana cattle kings make their fortunes can easily be understood from the following facts: D. A. G. Flower, of Helena, drove, last August, to Billings, and further by rail to Chicago and a market, 1,840 head of cattle, which sold for \$98,200. At St. Paul some butchers got the privilege to pick several steers, at \$100 per head, from the lot. It is safe to say that the prime cost price of this herd was below \$25 per head. This is better than gold mining.

A WOOLEN MILL is to be built at Tacoma, W. T.

OFFICIAL RECORD.

In this Department is given official information concerning the affairs of the Companies included in the "Villard System," namely, the Northern Pacific Railroad Company, the Oregon and Transcontinental Company, the Oregon Railway and Navigation Company, the Oregon and California Railroad Company, and the Oregon Improvement Company.

NORTHERN TRANSCONTINENTAL SURVEY.

Extract from Report of the Director to Henry Villard, Esq., President Northern Pacific Railroad Company.

NEWPORT, R. I., March 12th, 1883.

DEAR SIR:—I have the honor to transmit herewith a brief report of what has been done during the past season in the various departments of this Survey.

Yours Respectfully,

RAPHAEL PUMPELBY.

In the matter of the Washington Territory coals, the cost of acquiring the 2,000 acres of coal land decided upon by the Survey, not including the price of the land, has been several times saved by the N. T. Survey.

When the Survey undertook the selection of the coal lands on the Sound, nothing was known of the extent of the bituminous coal fields beyond a few sections on Carbon and Green Rivers.

In the Wilkeson field 7,680 acres of possibly available coal lands on even sections were explored by the Survey, and 1,000 taken as the only really desirable portion.

It is well within the truth to say that, aside from their great intrinsic value, the bituminous coal lands already selected by Messrs. Willis and Eldridge will have a market value as coal lands, within ten years, of not less than \$2,000,000.

The great importance of finding bituminous steam coal for the locomotives of the Company, caused me to begin explorations early in Montana. In June, Mr. Eldridge, geologist in charge, after examining the already known prospects of the Chestnut property, discovered, within three miles of the tunnel, a field of bituminous coking coal. This he has traced nearly eight miles by prospecting pits, and has tested in depth at several points sufficiently to determine the areas desirable to be purchased.

This work resulted in recommending the purchase of about 1,000 acres and the abandonment of as much more, the value of which could not have been determined without this exploration.

Lying as it does almost on the line and near the summit of the Rocky Mountains, this coal is of great value both for the road, and for sale as coal and as coke for the mining districts.

There are several seams of this coal, but I am not yet in a position to state the aggregate thickness of available and valuable fuel. The individual seams, where tested, show from four to eight feet thickness of merchantable coal. During my rapid reconnaissance trip last summer, I determined the position of the line of outcrop of the coal horizon along a distance of several hundred miles.

I instructed Mr. Eldridge to examine this line with more care, and during the autumn he explored it carefully in its windings between the Yellowstone and Missouri. While bituminous coal was found, frequently of a quality to render it very valuable for local domestic use in a treeless region, Mr. Eldridge discovered promising prospects only in one portion of the region. The coal was there within four miles of an extensive deposit of magnetic iron ore.

This region will be carefully examined during the coming season. It is very near the best route for the Benton Branch.

A hurried trip was also made by Mr. Eldridge to explore for coal near the National Park. Coal was found at several points, but in too thin beds to be of use.

A reconnaissance exploration for coal was made by Mr. B. T. Putnam, in the autumn, in the country between the Mullan tunnel and Missoula. The coal found was not available as regards quantity or quality, or it was, as at Missoula, merely a lignite of low value for locomotives.

Mr. Putnam, however, examined the deposit of mag-

netic iron ore near Cable City, and found it to be of great extent and of corresponding value, as shown by our analysis of a commercial sample taken by Mr. Putnam, viz.: 62.82 per cent. metallic iron; 0.036 per cent. phosphorus. It is very high in iron, and remarkably low in phosphorus. Owning this, the Company would have, with its coking coals from Bozeman or perhaps to be found nearer, the materials necessary for manufacturing steel rails at a reasonable cost.

Mr. Putnam was also detailed to make a special examination of the copper discoveries at Copperopolis.

Before the discovery of valuable steam coal near Bozeman, I had experiments made in the laboratory, and afterwards at some coke ovens in Pennsylvania, on a process invented in the Survey for making a good coke fuel from the Dakota lignites. These experiments resulted very successfully, and I have reason to believe that coke can be made in Dakota at about \$5.50 per ton, if needed. It would have a high heating power, and might be specially useful during the season of ripening wheat, when there is danger of fire from lignite or bituminous coal.

The topographical work of the Survey has been pushed vigorously. Mr. Wilson, chief topographer, has surveyed nearly four square geographical degrees, covering the country just east of the Belt Mountains, between the Yellowstone and the Missouri, and including the valleys of the Musselshell and Judith.

Mr. Goode has extended the previous year's work in the Yakima country eastward to the Columbia, and westward to the summit of the Cascade Range.

Mr. Nell has surveyed the country north of the latitude of Spokane Falls between Clark's Fork and the Colville Indian Reservation.

These surveys are almost wholly platted and ready to be photo-lithographed in order to give working maps for the use of the special parties working in those fields.

In May I shall be able to hand you printed copies of these maps showing some of the results of the work of the different departments. Next year all the facts will be represented on these sheets, and also on those to result from the coming season's surveys.

In the Yakima region, the forest was carefully studied by Assistant Brandegee, and the extent and composition of the forest will be fully represented.

And I hope to add also the soil classification, and, provisionally, the climate facts.

In the Forest Department, Prof. Sargent has made a trip over the Dakota and Minnesota Division. He also sent a special assistant, Mr. H. C. Putnam, a successful lumber manufacturer, to study generally the lumbering industries of the Pacific Coast, and to make a general survey of the Company's forests on the Sound, and in the interior, and in Minnesota. This resulted in a report a copy of which was sent to your Land Commissioner, and one will follow this. Mr. Brandegee has studied the forest on the east slope of the Cascades, and Assistant Templeman has incidentally gathered a large amount of information concerning the forests on the Sound and on the Skagit and Steilacoomish Rivers.

All the work of this department goes to prove that the Northern Pacific R. R. has at present three great forests of immense value in the near future. By the establishment of a firm and well considered policy with reference to preservation from fire and theft, and to sales of stumpage—not of land—the N. P. R. R. will own the greatest lumber estate and be the greatest lumber carrier in the world.

The great importance of this fact led to the offering of several recommendations from this department of the Survey as a result of the work of the past season.

One of these of immediate importance was that indemnity lands should be taken to the fullest extent possible in forest lands, especially in the Cœur d'Alene and Bitter Root Mountain regions. Farming lands will be occupied by settlers, and, in any event, bring traffic to the road; but the forests will bring not only traffic to the road, but, under proper management, long continued and high royalties.

Other recommendations were also made concerning forest policy and with regard to plantations in the treeless districts.

In the department relating to Soils, Professor Hilgard traversed the Yakima region, and has had observations

made in eastern Washington, and in the regions covered by the topographical parties. The results of this department will probably soon be ready to map.

The Department of Forage Plants was organized too late to give much of result during the past season. Mr. Canby issued instructions for observations, and made a journey through eastern Montana with reference to planning the work.

It is proposed, aside from the detailed observations of the collectors accompanying the topographical parties, to have the whole country comprehensively visited by one or two men of experience in cattle ranching, who will look at all parts of the territory covered by the N. T. Survey from a business point of view, taking into consideration all the questions that contribute to success or failure in this occupation. These expert assistants will be men familiar with the business in all its details and in all parts of the country.

I propose, as soon as I can find the right kind of man for so difficult a task, to have a general survey made of the arable lands by a farmer familiar with all that relates to agriculture in interior regions, and capable of weighing all the facts of climate, quality of soil, irrigation, etc.

In the Department of Climate and Rivers, which was organized late last summer, Prof. Holden has compiled and platted all existing information concerning the climate and agricultural experience, not only in our field, but to the extreme north of British Columbia.

He has also received answers to a large number of circulars, and instructions were issued for stream gauging in time to test the method, and prove that it could be easily executed.

Prof. Holden has also established stations for the observation of maximum and minimum daily temperature and of rain-fall at the following points to fill out gaps in the network of Signal Service Stations: Jamestown, Dak.; Little Missouri, Dak.; Gallatin, Mont.; Butte City, Mont.; Pleasant Grove, Washington Territory.

While the topographical parties will determine the distribution of the irrigable lands, they will also establish stream gauges for obtaining a record of the amount of water at different seasons and in successive years at critical points. All the data will be gathered almost incidentally that may be necessary in determining the practicability or advisability of establishing great or small irrigation enterprises.

NORTHERN PACIFIC RAILROAD.

EASTERN DIVISIONS.

CIRCULAR NO. 54.

GENERAL MANAGER'S OFFICE, ST. PAUL, {
March 5th, 1883.

G. W. Cross, Superintendent of Transportation, Northern Pacific Railroad, having tendered his resignation, the same has been accepted, to take effect April 1st, proximo.

J. T. Odell, Superintendent Dakota Division, has been appointed Superintendent of Transportation, Eastern Division, to take effect same date.

H. HAUPR, General Manager.

CIRCULAR NO. 55.

GENERAL MANAGER'S OFFICE, ST. PAUL, {
March 5th, 1883.

E. J. Westlake has been appointed Superintendent of Dining Cars on Northern Pacific Railroad, to take effect April 1st, proximo.

The supervision of this office will also extend to Hotels and Restaurants along the line of the N. P. R. R. so far as to examine and report whether conditions of leases are complied with in reference to the character of meals and accommodations furnished to travel-ers and employees.

The Superintendent of Dining Cars has authority to purchase all perishable supplies.

Supplies that can be kept in stock to be procured by requisition on Purchasing Agent.

Monthly reports will be made to General Manager of supplies purchased, amount and value consumed, and amount and value on hand in stock, and where located.

H. HAUPR, General Manager.

(Continued on fourteenth page.)

DAKOTA'S WHEAT FIELDS.

Mr. S. S. Blanchard, formerly of Boston and now of Fargo, Dakota, lectured before the Young Men's Christian Association last evening on "Dakota and the Wheat Fields—A Word to Young Men About the New Northwest." He spoke especially of the valley of the Red River of the North as a wheat-growing region. There are evidences, he said, that the valley was once the bed of a lake. In the soil are ingredients which make it especially favorable to the growth of wheat. He had seen samples of wheat grown on land on which that grain had been raised every year for fifty or sixty seasons—in the earlier years by the employees of the Hudson Bay Company—without resort to any fertilizer. The farmers begin sowing as soon as the soil for three inches from the surface is free from frost. Often the soil is frozen to a depth of six feet, and the moisture coming up as the season advances keeps the roots of the grain properly watered, even in the absence of rain. The speaker said that Dakota offers good inducements to young men with capital enough to equip the farms which the Government will give them, or which they can select at a low price per acre. Because of the extensive use of machinery and the regularity of the work of wheat raising, that industry is more like manufacturing than like farming, and can be profitably pursued by persons of little experience as farmers. A young man could make a fair start in wheat raising with a capital of \$1,500.—*N. Y. Sun*, Feb. 28th.

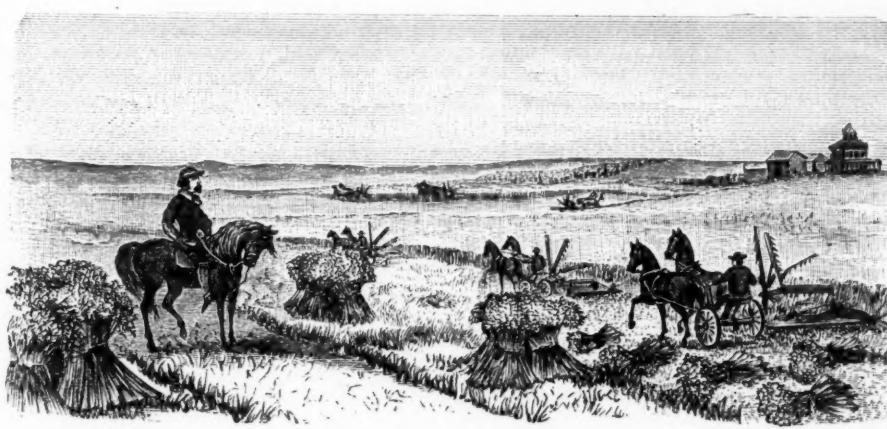
WHERE TO LOCATE.

From the Jamestown Capital.

The objection is frequently made that the Northern Pacific Railway belt is not desirable for settlement, because the price of the Government land within its limits is rated as "double minimum." That is to say, when settlers come to prove up they have to pay \$2.50 per acre for their claims, whilst in all other sections of the country the price is only one-half that amount. The *Capital* has called attention to this subject before, and shown the injustice in it. But at the same time, we think settlers in many cases overestimate the disadvantage they have to suffer from this law. At most it only affects pre-emptions and commuted homesteads. But in most cases a homestead entry is lived out, or at least it should be, and the effect of the law, therefore, is almost wholly applicable to pre-emptions. And in these it only involves an additional expense of \$200.

But there are within the railway belt advantages which greatly tend to counteract this additional cost of the pre-emption, and more than make up for it. In the first place, land is worth more in this section than in others, and the \$200 is in some cases made up many times over. Within the limits of the railway land grant more capital has been attracted, and consequently more money is in circulation. Large farms are being opened up by people of means, the proprietors of which are always ready to give work to a settler on a homestead

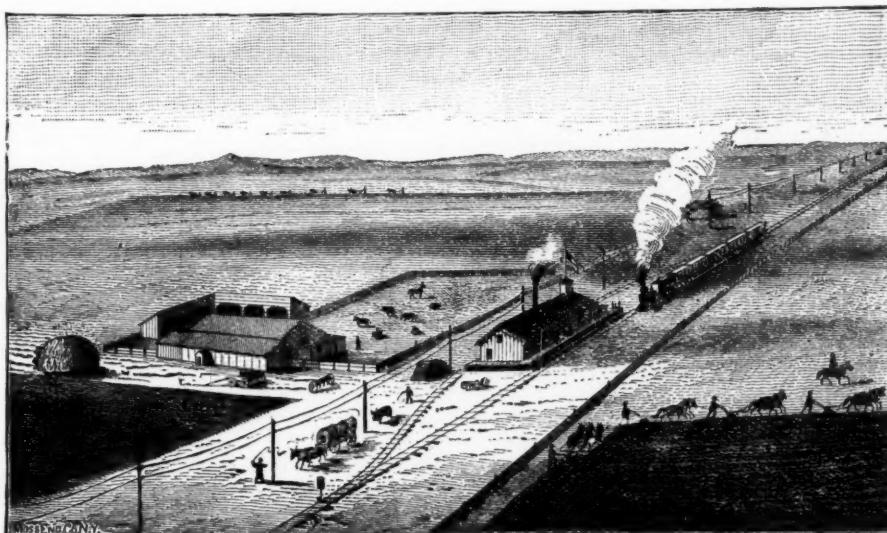
adjoining at good wages. This is a great advantage to a man of small means, and enables him to keep his family until he can get his own farm sufficiently under cultivation to yield him a living. This season there will be a very large amount of land broken, and we fear it will be impossible to find men and teams sufficient to do the work. One real estate man last week received an order to contract for 900 acres of breaking. These chances to put in work at profitable wages are much more frequent within the railway belt than in any other section of the country. Indeed, men and teams can get all the work they want during the summer season within the railway limit, and will probably be



HARVEST SCENE IN DAKOTA.

able to do so for years to come. But this cannot always be done in outside localities. By this means the \$200 additional cost of a pre-emption can soon be made.

There are several other reasons why it is desirable to locate within the railway limit, but those mentioned are sufficient to show that persons make a mistake who settle outside simply because it costs \$200 more to prove up a pre-emption claim. Homesteads and tree claims are the same in all parts of the country.



A DAKOTA WHEAT FARM.

The Signal: Flour, per barrel, \$7; wheat, per bushel, 75 cts.; oats, per bushel, 75 cts.; barley, per bushel, 75 cts.; potatoes, per bushel, 50 cts.; bacon and hams, per pound, 15 cts.; shoulder, per pound, 12 cts.; beef steak, per pound, 12½ to 15 cts.; boiling meats and roasts, per pound, 10 cts.; lard, per pound, 15 cts.; butter, per pound, 37 cts.; apples, per pound, 5 cts.; sugar, from 5 to 6½ pounds for \$1; coffee, 5 pounds for \$1; calico, 12 yards for \$1; nails, 8 and 10 cents per pound.

THE RUSH TO DAKOTA.

From the Milwaukee Telegraph.

Mr. Kendall, who has been to Dakota, and knows just what he is talking about, and is so honorable and has so much at stake that he can only talk the truth, is prepared to give clear and desirable information about the Territory. The following is taken from the *Alexandria Herald*, and gives a glowing account of Dakota: "We are asked why it is that every one is going to Dakota. We suppose it is because it is fashionable. The rush to Dakota is as enthusiastic as ever it was to the gold fields of California, and upon a far greater and grander scale. In the gold craze it was a lottery, and most people drew blanks, but in this scheme all draw prizes.

They are coming by excursions, in regular trains, sleepers and stock cars; by carriages, white covered wagons, on horseback and on foot. They are coming by battalions and columns, by townships and counties, all flocking out here to settle Dakota. Every shade of business, every class of men and women, are represented. The lawyer has left his brief, the doctor his patients, the merchant locked his store, the banker closed his bank, the mechanic dropped his tools, the laborer

quit his work, the farmer sold his possessions, the teacher resigned his position, and all rush pell-mell for Dakota to secure a quarter section of her dirt—the sure foundation of a fortune. Some come for health and all for wealth, but few are dissatisfied. Hundreds who emptied their pocket-books to obtain the \$14 necessary to file upon their land three years ago are to-day worth from \$2,000 to \$3,000, with good farms and happy homes. Many single ladies, who were teachers in the East on limited salaries, rejoice to-day in the possession of 320 acres of land. Several hundred thousand dollars were made last year out of investments in Dakota lands. Pale-cheeked invalids have had restored to them the rose of health, and the greatest prosperity has smiled upon them all. Is this not sufficient reason why the throng is surging to Dakota? The abundant harvests of this year are the marvel of the age. The sight of it has filled the people with enthusiasm. The people of the East have learned that we have a feast here the year round in our lands, and that they are welcome to come and partake.

THE DIVISION OF DAKOTA.—

The Chicago *Inter-Ocean* has expressed the opinion, from information it can gather, that the population of all Dakota will be increased 300,000 during the present year. Of this increase it is perfectly safe to say that North Dakota will receive one-half. We all have the requisite number of population by the time another year rolls round to entitle that portion

of Dakota north of the forty-sixth parallel to admission as a State. The *Republican* don't by any means abandon the idea of division. It believes this Territory will be divided at the very next session of Congress, and it has good reason for this belief. All of those who have schemed, plotted and traded against division will be consigned to their political graves, from which there is no resurrection. The future great State of North Dakota will have no use for men who have tried to strangle her in her infancy.—*Fargo Republican*.

(Continued from twelfth page.)

CIRCULAR NO. 56.

GENERAL MANAGER'S OFFICE, ST. PAUL, {
March 10th, 1883. }

B. McHugh, Superintendent of the Minnesota Divisions, having tendered his resignation, the same is hereby accepted, to take effect April 1st, proximo.

M. C. Kimberly, General Assistant Engineer of the Construction Department, is appointed Superintendent of the Minnesota Divisions, and will enter upon his duties at the same date.

H. HAUT, General Manager.

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WESTERN DIVISIONS.

CIRCULARS.

ASSISTANT GENERAL MANAGER'S OFFICE, NEW {
TACOMA, W. T., Feb. 15th, 1883. }

Mr. H. W. Fairweather, under date of February 1st, 1883, having tendered his resignation as Superintendent of the Pend d'Oreille Division, and insisting upon being at once relieved, his resignation is reluctantly accepted.

Mr. F. F. Griffin is hereby appointed Superintendent of Pend d'Oreille Division, taking effect February 16th, 1883. He will be respected and obeyed accordingly.

J. M. BUCKLEY, Ass't General Manager.

ASSISTANT GENERAL MANAGER'S OFFICE, NEW {
TACOMA, W. T., Feb. 19th, 1883. }

Mr. Otis Sprague, having tendered his resignation as Superintendent of Pacific Division, to take effect February 19th, 1883, the office of Superintendent of Pacific Division is hereby abolished.

All business pertaining to that office will be transacted by the Assistant General Manager.

J. M. BUCKLEY, Ass't General Manager.

LEASE OF THE OREGON AND CALIFORNIA RAILROAD.

The following resolutions were proposed to the London meeting of the Preferred Stockholders of the Oregon and California Railroad Company, held Saturday, March 17th, 1883, and unanimously adopted:

First. That the net earnings of the year 1882, to an amount not exceeding \$300,000, be distributed as a dividend in cash, and not in scrip.

Second. That for the purpose of completing and equipping the Southern Extension to a junction with the Central Pacific, and of renewing and improving the old lines, the Company is authorized and directed to execute to the Farmers' Loan and Trust Company, of New York, a second mortgage on all its lines and property, present and future, to secure an issue of second mortgage bonds, such bonds to be issued at the rate of \$10,000 for each mile of constructed road, and so that the aggregate prior lien (both of the first and second mortgages), having priority over the preferred stock, shall not exceed \$30,000 for each mile of constructed road; such bonds to bear interest at the rate of seven per cent. per annum, payable half-yearly, on the first days of April and October, at the same places and at the same rates of exchange as the existing first mortgage bonds, and to mature on the 1st day of April, A. D. 1933; the form and details of such bonds and mortgage to be submitted to and approved of by the trustees for the preferred stockholders.

Third. That the proposals of the Oregon and Transcontinental Company to contract for the construction and equipment of the Southern Extension and its completion by the 1st day of July, 1885, be adopted; and that the Company shall accordingly issue to the contractors, in payment for such construction, all the unissued first mortgage bonds, and, in addition, second mortgage bonds (as authorized by the previous resolution), at the rate of \$10,000 per mile for each mile of road of the main line between Portland and the junction with the Central Pacific, the contractors agreeing to complete and equip the extension and settle and liquidate all outstanding construction accounts, the details and form of the construction contract to be submitted to and approved of by the preferred stock trustees, and such contract not to be valid until executed by them.

Fourth. That the company be further authorized and directed to lease its lines and property to the Oregon and Transcontinental Company, or its assigns, for 999 years upon the following terms: The lessee shall pay as rental to the lessor (in addition to all bond interest) for the year 1883, \$320,000, for the year 1884, \$320,000, for the first half of 1885, \$160,000 (\$20,000 of such rental for the years 1883 and 1884, and \$10,000 for the half of 1885, to constitute a management fund, the balance to be distributed as dividend), and thereafter a rental of thirty-five per cent. of the gross earnings of the road, which percentage the lessee shall guarantee to be sufficient to pay the bond interest on the first and second mortgages, the sinking fund on the first mortgage, and a minimum additional sum of \$260,000 (\$20,000 to go to the management fund, the balance to be distributed as dividend); the lessee shall further pay

off, or renew, at maturity, the second mortgage bonds, but shall be entitled to have issued to it, in lieu of any so paid off, other bonds of like tenor and duration, and so on until the expiration of the lease, so that the amount, character and incidence of the second mortgage debt shall not be changed, except that by liquidation of the present first mortgage debt, the second mortgage debt now authorized will ultimately become the first and only prior lien on the road. The lessees shall be empowered, whenever they think fit, to complete the west side division to Astoria and Junction, and to receive in payment for such extension all the unissued first mortgage and second mortgage bonds. The lease shall contain a provision for reduction of the percentage of operating expenses on the 1st of January, 1886, and at the end of every subsequent three years according to the actual diminution (if any) of the average percentage of operating expenses of the previous three years (but no such reduction to be made in respect of a diminution of less than three per cent.), and may also contain a provision permitting the lessee to cancel the lease, either on the 31st day of December, 1885, or the 31st day of December, 1886, by giving six months' previous written notice. But in case such notice shall be given, the rental for the half year ending December 31st, 1885, shall not be a percentage, but a fixed sum of \$160,000 (\$10,000 to go to the management fund, the balance to be distributed as dividend), in addition to bond interest and sinking fund; and in case such notice shall only expire on the 31st December, 1886, the rental for the year ending December 31st, 1886, shall not be a percentage, but a fixed sum of \$320,000 (\$20,000 to form the management fund, the balance to be distributed as dividend), in addition to bond interest and sinking fund. The details and form of lease shall be submitted to and approved of by the trustees for the preferred stockholders, and it shall not be valid until executed by them.

Fifth. That the following gentlemen shall act as Trustees for the Preferred Stockholders, and be placed in office as Directors for the coming year: R. D. Peebles, G. H. Hopkinson and Patrick Buchan, of London.

Sixth. That the qualification for Director shall be the ownership of fifty shares of preferred or one hundred shares of common stock deposited with the company during the term of office.

TACOMA AND ITS MOUNTAIN.

From "Travels on the Pacific Coast," by Newton H. Chittenden.

New Tacoma is keeping well abreast of her northern rival, and through the combined advantages of her commanding commercial position, and the certain utilization of her great resources of coal, lumber, lime and agriculture, has good grounds for expecting to always rank among the principal cities of the coast. Within the last twelve months this rapidly rising city has expended about \$500,000 in car shops, coal bunkers, wharves and warehouses, \$250,000 in 150 residences, \$36,000 in 24 stores, \$25,000 in churches, \$23,000 in banking houses and printing offices, \$15,000 on hotels, \$10,000 in a court house, \$8,000 in a furniture factory, \$5,000 in saw mill improvements, and \$2,000 in sidewalks, a total of nearly a round million of dollars. Her coal mines are producing about 25,000 tons a month, and the little valley of Puyallup, close at hand, is a perfect hop bonanza, producing over \$400,000 worth the past season. During my recent travels in British Columbia I met an old man nearly seventy years of age, who told me that he cleared about \$3,500 this year from his little hop yard in this valley, doing all the work except picking himself. Whatever may be the future of Tacoma's prosperity, nothing can ever rob her of the matchless glory of her mountain view. Looking at the snow-crowned summit of Mount Tacoma, through a good glass, on the bright cold morning of the 3d inst., a cloud of vapor was seen rising from it. Soon after I read a letter from a resident of Yakima Valley, thirty miles to the southeast, describing his observation of the same. It is doubtless caused by the snow falling into its still smouldering crater. A horse back trail is being cut from the N. P. R. R., near Wilkeson, twenty-six miles, for the convenience of tourists who wish to ascend the Grandest Mountain of the Pacific Slope.

A COMPANY is being organized at Benton, M. T., to make the trip to the Alaska gold fields on horseback. A large number of names have been enrolled, and officers have been chosen. They expect to be four months on the road and to prospect the unexplored country through which they will pass.

A LITTLE NONSENSE.

An exchange says the best thing to give an enemy is kindness; but that all depends on the enemy's size.

"Be jabers!" exclaimed an Irishman, "I've slept sixteen hours. I went to bed at eight and got up at eight."

CURRAN'S ruling passion was a joke. In his last illness, his physician, observing in the morning that he coughed with more difficulty, he answered: "That is rather surprising, as I have been practicing all night."

A PENNSYLVANIA inventor has evolved a new rat trap, in one end of which is a mirror. This may do for the female rats; but when a male rat notices that the bait looks double he will think he has had enough and go home.

AN EAR FOR MUSIC: "Yes," said Fenderson, "I've got quite an ear for music." "You have quite an ear, sure enough," said Fogg, "but I wasn't sure it was for music. I didn't know but it was intended for a windmill." —Boston Transcript.

AN ENGLISHMAN shooting small game in Germany said to his host that there was a spice of danger in shooting in America. "Ah!" said the host, "you like danger mit your sport. Then you go out shooting mit me. The last time I shoot my bruder-in-law in the schtomack."

"You can't add different things together," said a school teacher. "If you add a sheep and a cow together it does not make two sheep or two cows." A little boy, the son of a milkman, held up his hand and said: "That may be with sheep and cows, but if you add a quart of water to a quart of milk, it makes two quarts of milk. I've seen it tried."

A SCISSORS-GRINDER was ringing his bell "to grind" on Brush Street, when a young man called to him and asked: "Say, can you sharpen everything?" "Yes, eferytangs." "Can you sharpen my wits?" "Your wits? Vhell, I guess you haf to go und get a new handle und back-spring put in first! I must haf sometings to hang on py!" —Detroit Free Press.

LORD TENTERDEN had an inveterate habit of snubbing witnesses. One day he was presiding at a circuit dinner, and asked a country magistrate if he would take venison. "Thank you, my lord; I am going to take boiled chicken." "That, sir, is no answer to my question. I ask you again if you will take venison, and I will trouble you to say yes or no without further prevarication."

HEAPING ON THE HORRORS: Lady Midas—"And we were bustled into the train anyhow, my dear Mrs. de Tompkins; and only imagine our horror, when the train had started, at discovering that we were actually in a second-class carriage!" Grigsby (innocently)—"Dear me! Yes! Very awkward indeed. You'd taken third-class tickets, I suppose?" (Horror of Lady and Miss Midas, who generally take a saloon carriage all to themselves). —London Punch.

GENEROSITY ITSELF: A man was quietly munching on a piece of pie in a saloon, Friday morning, when a look of distress suddenly displaced the serene expression on his face. Taking something from between his teeth, and looking at it, he cried to the waiter: "Here, you, there's a stone I found in this pie!" The waiter took it, glanced at it critically, and, handing it back, briefly said: "It's no good to us, you can have it." —Danbury News.

THIS IS THE GREETING WHICH A TEXAS PAPER EXTENDS TO A NEW PASTOR: "The Rev. Mr. Glass, the preacher for the ensuing year, has come. He has pretty good clothes, doubtless purchased with means saved by systematic starvation from his salary of last year, for he looks a little lank. It is, perhaps, quite proper that the 'world,' and especially his church members, should take his good clothes into consideration and dead-beat the Lord this year. There is nothing more to be appreciated than free religion."

Prices of Northern Pacific and Oregon Securities.

FURNISHED BY DECKER, HOWELL & CO., 58 BROADWAY, NEW YORK.

The following table shows the highest and lowest prices and sales of the Northern Pacific and Oregon Securities on the New York Stock Exchange, from March 3d to April 2d.

1883.	No. Pac. Com.			No. Pac. Pfd.			O. & Transcontinental			Oregon R. & N. Co.			O. Imp. Stock.		Oregon Imp. Bds.		O. & Trans. Bds.		
	High.	Low.	Sales	High.	Low.	Sales	High.	Low.	Sales	High.	Low.	Sales	Bid.	Offer.	Bid.	Offer.	Bid.	Offer.	
March 3d.....	50½	49	2,200	87½	85½	22,800	85½	84½	11,500	139	137	500	.....	.....	90	91	92½	93
March 5th.....	50	49	8,100	87½	86	7,700	85½	84	6,600	.....	.....	.....	90½	91	92½	93½	92½	93½
March 6th.....	49½	48½	7,000	86½	85½	7,200	85½	83½	6,400	.....	88	..	.....	.....	.....	93½	93½	93½
March 7th.....	49	48½	6,900	86	85½	4,800	84½	83½	4,100	.....	.....	88	90	91½	92½	93½	93½	
March 8th.....	49½	49	2,100	86½	85½	5,700	85	84½	4,700	.....	.....	.....	.....	91½	92½	92½	93	
March 9th.....	49½	49½	100	86½	86½	3,700	85½	84½	.....	.....	88	....	.....	92	93	93½	93½	
March 10th.....	49½	49½	3,200	86½	85½	4,200	84½	84	3,100	.....	.....	.....	91	92	92½	93	92½	93
March 12th.....	50½	49½	14,500	86½	86½	5,800	85½	84½	4,100	139	139	100	.....	.....	93	93½	93	93½
March 13th.....	51½	50½	17,600	87½	86½	9,400	85½	84½	5,300	.....	.....	.....	91½	91½	93	93½	93	93½
March 14th.....	50½	49½	11,800	87	86½	6,000	84½	84½	1,800	.....	.....	.....	.....	.....	92½	93½	92½	93½
March 15th.....	50	49½	5,700	86½	86	1,700	84½	84	2,000	.....	.....	.....	91	....	92½	....	92½	....
March 16th.....	49½	49½	6,500	85½	84½	4,300	83½	83	2,900	.....	.....	.....	91	91½	93	93½	93	93½
March 17th.....	50½	49½	6,700	86½	55	9,600	84½	83	7,700	.....	.....	.....	91	91	93	93½	93	93½
March 19th.....	51	50	18,400	87½	86½	18,300	84½	84½	3,800	.....	.....	.....	90½	91½	93½	93½	93½	93½
March 20th.....	50½	50½	6,200	87½	86½	7,500	84½	83½	3,600	.....	.....	.....	90½	91½	.....	.....	90½	91½
March 21st.....	50½	50½	4,200	86½	86½	3,600	84½	83½	2,300	.....	.....	.....	90%	91	92½	93½	92½	93½
March 22d.....	51½	50½	10,800	87½	86½	8,400	84½	84	3,000	138	138	100	85	88	91	93	93½	93½	
March 23d.....	Good Friday			Good Friday			Good Friday			Good Friday			Good Friday		Good Friday		Good Friday		
March 24th.....	51½	50½	8,700	87½	86½	8,700	84½	81½	4,700	.....	.....	.....	91	93	93½	93½	93	93½
March 26th.....	51	50½	....	87	86½	7,100	84½	84½	100	137	137	....	90	90½	.....	.....	90½	90½
March 27th.....	50½	49½	8,000	86½	85½	3,400	84½	83½	2,000	.....	.....	.....	90½	90½	92½	93½	92½	93½
March 28th.....	50½	50½	5,200	86½	86½	5,700	84½	84½	2,400	.....	.....	.....	90	91	93	93½	93	93½
March 29th.....	51	50½	9,700	87	85½	12,900	84½	82½	14,300	.....	.....	.....	90	91	93½	93½	93½	93½
March 30th.....	50½	49½	20,600	86½	85½	11,600	83	81½	30,400	138	138	100	90½	91	93½	93½	93½	93½
March 31st.....	50½	49½	1,300	87	86	11,600	83½	81½	ex. 12,000	138	138	100	90½	92	93	93½	93½	93½
April 2d.....	49½	49½	6,500	86½	85½	3,000	81	79½	10,200	.....	.....	.....	90%	93	93½	....	93½	....

O. R. AND N. CO. EARNINGS.

The Earnings for the first eight months of the current fiscal year were as follows:

	Gross.	Net.
July 1st to January 31st.....	\$3,093,600	\$1,585,600
February.....	261,700	74,200
Total.....	3,355,300	1,659,800
February, 1882.....	289,284	98,757

The decrease in earnings for February as compared with the earnings for the same month of last year, was caused by the almost entire interruption of traffic on the railroad lines of the Company, during the first ten days of the month, by two severe freshets. The winter, which is now fortunately over, has been the most severe ever known.

OREGON IMPROVEMENT COMPANY.

(Owning and operating the Pacific Coast S. S. Co., the Columbia and Puget Sound R. R. Co., and the Seattle Coal and Transportation Co.)

The earnings of all Companies for first two months of current fiscal year were as follows:

	Gross.	Net.
December, 1882.....	\$271,209	\$71,330
January, 1883.....	240,543	42,114
Total.....	\$511,752	\$113,444
Corresponding two months of last fiscal year.....	\$471,461	\$98,149

The diminished earnings for January, as compared with December, are due to the prevalence of stormy weather, and the consequent irregular running of steamers on the Portland and Puget Sound routes.

NORTHERN PACIFIC EARNINGS.

The approximate Gross Earnings of the Northern Pacific Railroad Company for the month of March were \$583,400 00 Road miles, 1,701

Corresponding month of last year..... 373,141 20 " " 972

Increase \$210,258 80 " " 729

Nine months this year..... \$5,672,925 29

" " last " 3,658,434 86

Increase \$2,014,490 43

NORTHERN PACIFIC RAILROAD LAND SALES.

Approximate land sales for the month of March, 1883, with corresponding month of previous year:

Total	Acres.	Amount.	Town Lots.	Amount.
March, 1883.....	53,956	\$203,326	\$42,443	\$245,769
March, 1882.....	35,826	128,544	15,600	144,144

Total increase, 1883, 18,130 \$74,782 \$26,843 \$101,625

Average per acre this year, \$4.13. Last year, \$3.59

DURING the past week one hundred and ninety-nine Government claims, amounting to thirty-one thousand eight hundred and forty acres, were filed on at the United States land office in this city; and final proof was made on seventy-three claims, aggregating eleven thousand six hundred and eighty acres. The officials state that in the general selection of claims, at present no marked preference is shown for any particular locality, but the filings are about equally distributed among the recently surveyed lands throughout the district.—*Fargo Republican*.

DREXEL, MORGAN & CO.

WALL STREET,

Corner of Broad, New York.

Drexel & Co.,
No. 34 South Third Street,
PHILADELPHIA.Drexel, Harjes & Co.,
31 Boulevard Haussmann,
PARIS.

Domestic & Foreign Bankers

Deposits received subject to Draft. Securities bought and sold on Commission. Interest allowed on Deposits. Foreign Exchange. Commercial Credits. Cable Transfers. Circular Letters for Travelers, available in all parts of the world.

ATTORNEYS AND AGENTS OF

Messrs. J. S. MORGAN & CO.,

No. 22 OLD BROAD STREET, LONDON.

Feb., '83—On.

NORTHWESTERN NOTES.

CHARLES H. PRESCOTT, as representative of the Northern Pacific Terminal Company, at Portland, recently paid the School Trustees \$75,000 cash for the block upon which the new Villard Hotel will be built.

In the early days of Montana the vigilantes placed a desperado on his mule and informed him that he had precisely fifteen minutes in which to leave the country. He quietly remarked, "Gents, if this mule don't balk five will do."

REMEMBER that five acres of trees will exempt forty acres of land, with all the improvements thereon, from taxation. This goes a long way toward paying the expense of planting, and thus the tree crop becomes clear gain. It is the best crop you can raise. Comfort and beauty are combined with profit, and all in large proportions. No other improvement does so much to enhance the value of a farm. Ponder this, and be wise.—*De Smet Leader*.

THE Secretary of the Interior has received a letter from Surgeon Heizmann, calling attention to the great therapeutical value of the mineral waters contained in the numerous springs with which the Yellowstone Park abounds, and recommending that the Government exempt the site at Steamboat Point from lease, and that in granting any leases or franchises to this public domain the Government retain the privilege of using all the waters.

It will not be long before the vast straw product of Dakota, which is now almost utterly worthless, will be utilized in the manufacture of the very best and most useful kind of lumber. Manufacturing establishments for the purpose of making straw lumber will be built up all over Dakota. Recent experiments have demonstrated that a durable and substantial lumber can be made with straw as the main ingredient. It is to be hoped that manufactoryes for the making of this kind of lumber will soon be established here and at other points throughout the North. They would solve the lumber problem, and afford our town builders and settlers on the prairies cheap material for the erection of houses.—*Fargo Republican*.

LIEUT. FREMONT, of Co. H, 3d U. S. Inf., who went East in November last, returned yesterday *en route* to Missoula. His father, General John C. Fremont, now seventy years of age, is hale and vigorous, rides forty or fifty miles a day on horseback, and enjoys it as he did thirty years ago. He will soon go to Mexico, and promises his son a visit when the Northern Pacific is completed. His mother, Mrs. Jesse Benton Fremont, is now fifty-eight years old, and in the enjoyment of splendid health. They reside in New York City. Lieut. Fremont, with his inherited taste for the frontier, is glad to get back to the mountains, but enjoyed greatly, after four years' post service, the winter in America's great city.—*Deer Lodge New Northwest*.

WHILE foreigners are pouring into Dakota every spring and summer and taking up our most desirable lands, there are thousands of deserving poor in the Eastern States who remain in poverty and wretchedness, either because they have not the nerve or are financially unable to make the move to this land of plenty. The Northern Pacific Company is making special efforts to induce German and other foreigners to immigrate thither. That is all right enough. There is plenty of room here for them. But it is greatly to be deplored that more of our own countrymen who are dragging out miserable lives in Eastern factories and workshops, cannot, or do not, avail themselves of the grand opportunities afforded here in Dakota for health and wealth without drudgery. Some special missionary work should be inaugurated to spread the gospel truth of Dakota's transcendent advantages among these people.—*Bismarck Tribune*.

UNION BRASS MFG. CO.,

CHICAGO, ILL.,

MANUFACTURERS OF

CAR TRIMMINGS

Hartley Reclining & Revolving Chairs

(now in use on many of the leading Railroads),

REVOLVING CHAIRS FOR PARLOR CARS,

AND THE CELEBRATED

SEARLE HOT WATER HEATER,

The most popular and best Heater extant.

The Orme Locomotive Valve,

THE BEST IN THE MARKET.

Also Wood Ceilings for Cars.

WORKS:

OFFICE:

97 to 109 Ohio Street, 103 Ohio Street.

J. HALL DOW, Pres't.

April, '83—cu.

THE OLD RELIABLE HALLADAY STANDARD WIND MILL,
27 YEARS IN USE.

GUARANTEED

Superior to any other make.
17 Sizes—1 to 40 ft. Power
Adopted by U. S. government at forts and garrisons and by all leading railroad companies of this and other countries.
Also the Celebrated

IXL FEED MILL,

which can be run by any power and is cheap, effective and durable.
Will grind any kind of small grain into feed at the rate of 6 to 25 bushels per hour, according to quality and size of mill used. Send for Catalogue and Price-List. Address

U. S. Wind Engine & Pump Co., Batavia, Ill.

April, '83—r.



April, '83—M.

Boston Daily Advertiser,
ONE DOLLAR A MONTH.Boston Weekly Advertiser,
ONE DOLLAR A YEAR.

The Boston Daily Advertiser is the representative paper of New England. The Boston Weekly Advertiser contains all the news of the week, and especially from all parts of the New England States.

April—m.

MACHINE TOOLS
OF ALL KINDS FOR
RAILROADS & MACHINE SHOPS.New York Agent for
BROWN & SHARPE MANUF. CO.

AMES MANUF. CO., Lathes, &c.

PRENTICE BROS. DRILLS,
BRIDGEPORT MACHINE TOOL WORKS, Lathes
and Planers.

E. P. BULLARD.

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MANUFACTURERS AND DEALERS IN

Railway Supplies,

AND IMPORTERS OF

JESSOP'S ENGLISH STEEL,

And Best English Crucible Steel and Charcoal Iron,

Wire Rope for Hoisting and Mining Purposes,

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—AND—

DEALERS IN GOVERNMENT BONDS.

NORTHERN PACIFIC

General Mortgage and Land Grant
GOLD 6's FOR SALE.No. 7 CONGRESS STREET
AND
No. 2 CONGRESS SQ.,
BOSTON, MASS.

Jan., m.

COOKE & CO.,

12 Cortlandt St., New York,

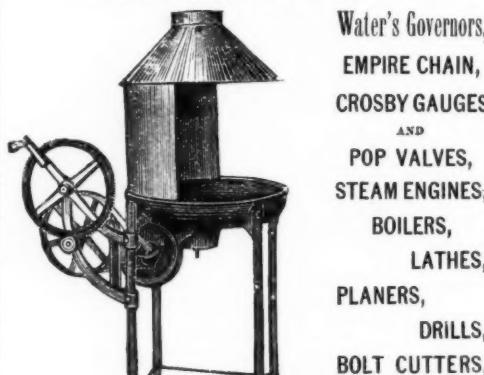
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Watson's Portable Forge,

Light, compact, durable, cheap. Also

GENERAL MACHINERY & SUPPLIES.

ROOT'S BLOWERS AND FORGES.



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CROSBY GAUGES
AND
POP VALVES,
STEAM ENGINES,
BOILERS,
LATHES,
PLANERS,
DRILLS,
BOLT CUTTERS,
&c., &c.

In writing please
mention this paper.

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St. Paul Advertisements.L. H. MAXFIELD. C. SEABURY. W. T. MAXFIELD, *Special***MAXFIELD & SEABURY,**

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ST. PAUL, MINN.Agents for the Oriental Powder Mills Mining and
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ECLIPSE WIND MILLS,
TANKS, PUMPS, PIPE, Etc.**

The Best Goods in the Market.

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March—cu.

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IMPORTERS AND JOBBERS OF
Dry Goods and Notions,
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New York Office, 53 Leonard Street.

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The Oldest Wholesale Grocery House in the Northwest.

A LLLEN, MOON & CO.,
Successors to P. F. MCQUILLAN & Co., Established 1859.
Manufacturers' Agents and Importers of
Teas and Coffees, English, French and German
Canned Goods and Delicacies,
and Fine Havana Cigars.

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Importers and Jobbers of
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GUNS AND SPORTING GOODS,
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Iron, Nails, Steel and Heavy Hardware,
Horse Shoes, Horse Nails, Bellows, Anvils, Vises,
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CORNER FIFTH AND SIBLEY STS.,
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F ARWELL, OZMUN & JACKSON,
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Wholesale Iron, Nails, Steel, Heavy Hardware and Carriage Materials,
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THE GREAT TRANSCONTINENTAL

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DESIRABLE LOTS FOR RESIDENCES

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April, '83—cu.

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Owes and offers for sale upwards of
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CHOICE NORTH DAKOTA LANDS

In Foster, La Moure, Barnes and Ransom Counties.

Joint owner with the Northern Pacific R. R. Company of town site of

CARRINGTON,

Foster County, Dakota, forty-three miles from Jamestown, on line of Jamestown & Northern R. R., and at junction of the

MOUSE RIVER AND THE DEVIL'S LAKE BRANCHES.

Lots first offered for sale Nov. 14th, 1882. Purchasers have been busy building, even in mid-winter. Many others are only awaiting the disappearance of the snow to erect stores, banks, workshops and residences. Carrington is the prospective

COUNTY-SEAT OF FOSTER COUNTY.

The same joint owners also offer lots in the

TOWN OF MELVILLE, FOSTER CO.,

Thirty-four miles from Jamestown, on the Jamestown & Northern R. R., and the

TOWN OF BUTTZVILLE, RANSOM CO.

Fifty miles from Fargo, on the Fargo & Southwestern R. R.

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JAMESTOWN, DAKOTA.

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Members of the New York Mining Stock Exchange.

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Certificates bought and sold.

Jan.—rk.

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IRON, NAILS, SPIKES, CHAIN,

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April—m.

EDWARD B. SMITH,

TOWNSEND DAVIS

SMITH & DAVIS,

GENERAL

INSURANCE AGENTS

(AND FORWARDERS),

Fire, Lake, Canal and Ocean Risks at Current Rates.

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THE CAMBRIA IRON CO.

Having enjoyed a reputation for more than a quarter of a century for fair dealing and excellence of its manufactures, has now a capacity of

150,000 TONS OF IRON AND STEEL RAILS

And most approved patented

RAILWAY FASTENINGS.

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CAMBRIA IRON COMPANY

218 South Fourth Street, Philadelphia,
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THE CAMBRIA IRON CO.

Having acquired the entire ownership of the

WIRE AND STEEL MILLS

Of the GAUTIER STEEL CO., Limited, will continue to produce all their specialties, such as Merchant Steel, Plow Steel, Wagon and Carriage Springs, Rake Teeth and Harrow Teeth, Agricultural Implement Steel and

ALL KINDS OF WIRE,

Well known for superior quality of material and excellence of workmanship.

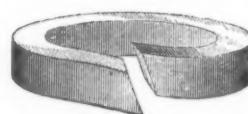
Address,

GAUTIER STEEL DEPARTMENT,
PHILIP E. CHAPIN, Gen'l Sup't., Johnstown.
New York Warehouse, 81 John St.
Philadelphia Warehouse, 523 Arch St.

VERONA TOOL WORKS, METCALF, PAUL & CO.,

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MAKE A SPECIALTY OF SOLID STEEL



RAILROAD TRACK TOOLS,

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They have been found the most Reliable and in all respects
THE BEST IN THE WORLD.

MURPHY & COMPANY,

231 Broadway, New York. 566 Canal St., Cleveland, O. 202 South Fourth St., St. Louis, Mo.
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PENNSYLVANIA STEEL COMPANY,

MANUFACTURERS OF

STEEL RAILS

FROGS, CROSSINGS, SWITCHES

AND

RAILWAY MATERIAL.

WORKS AT STEELTON, PENN.

Office: 208 S. 4th St., Phila.

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ESTABLISHED BY GEO. PILLSBURY, 1855.

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R. R. & MILL SUPPLIES, &c.,

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Our stock is unequalled in extent and variety in the Northwest. Car stock of Iron, Nails, Paper, &c., from Stock or Mills. Prices in competition with any market. Mail inquiries solicited.

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LOW PRICES TO INVESTORS AND SETTLERS.

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And has a very Large Business and a GREAT FUTURE.

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2,000,000 Families } Of the great population — no
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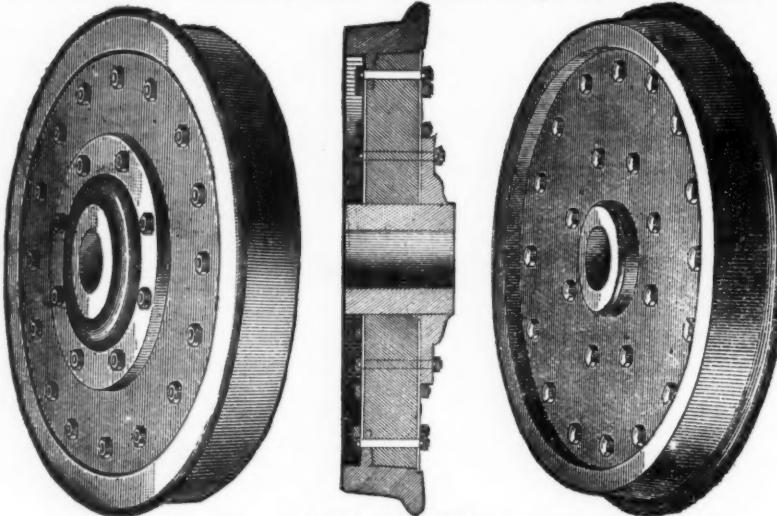
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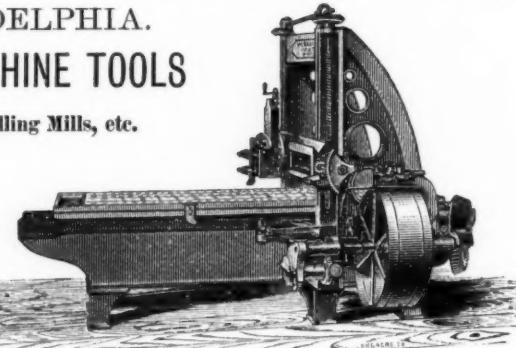
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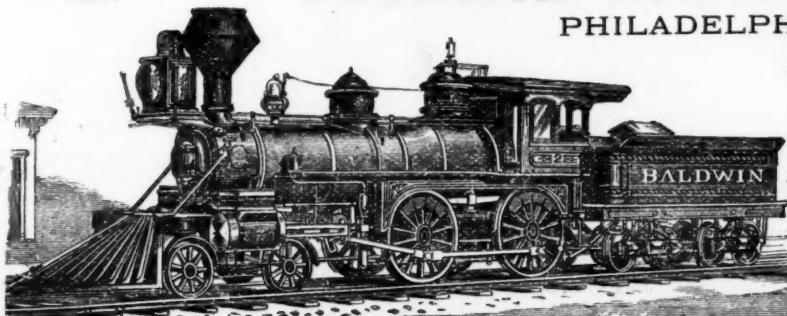
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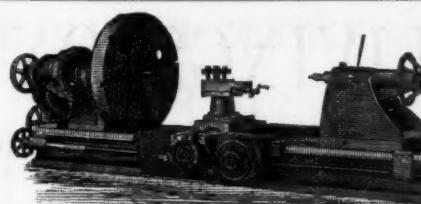


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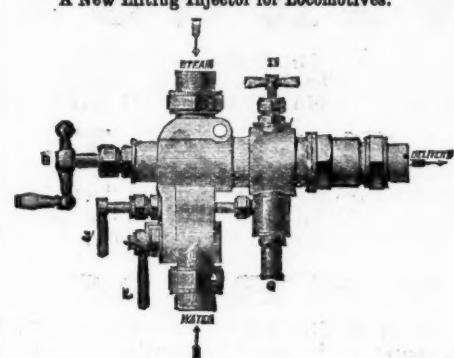
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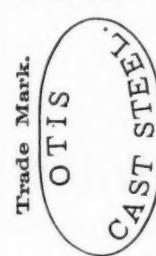
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ALL WORK THOROUGHLY GUARANTEED.

March, '83—cu.

LIVINGSTON! LIVINGSTON! LIVINGSTON! MONTANA.

The New Town laid out by the Northern Pacific Railroad Company, at the last crossing of the Yellowstone River, and at the Junction of the Branch Railroad to the Yellowstone National Park.

L I V I N G S T O N

is located at the east foot of the Belt Mountains, 1,030 miles west of St. Paul, where the low grades of the Yellowstone Division strike the heavy mountain grades. It is almost midway between the great lakes and the Pacific Ocean. The Railroad Company has reserved over 300 acres for the requirements of the future MACHINE SHOPS, Round Houses, Stock Yards and MANUFACTURING ESTABLISHMENTS at this point. Mines of fine bituminous

C O A L

now opened within eight miles of Livingston, and a branch track is being graded from the main line to the mines. The branch road to the NATIONAL PARK, sixty-three miles long, is now under contract to be COMPLETED NEXT JUNE. All the Tourist Travel to this Great Wonderland must pass through LIVINGSTON. Large deposits of FINE IRON ORE exist on the Park Line, near Livingston, as well as an abundant supply of excellent LIMESTONE. The Clarke's Forks

S I L V E R M I N E S

lie directly south of Livingston. The existence of IRON ORE, LIMESTONE and COAL in close proximity to this point seem to indicate the probability that Livingston will hereafter become an important point for Manufacturing and Railroad business, as well as for general commercial trade.

The prices of lots range from \$20 to \$1,000 each, according to location. Lots purchased in blocks adjacent to passenger depot must be improved with good buildings within eight months. Other lots are without building requirements.

TERMS: One-quarter cash on application, balance in four, eight and twelve months, with interest at the rate of seven per cent. per annum on deferred payments.

Lots for sale at the office of the **GENERAL LAND AGENT N. P. R. R.**, St. Paul, Minn. Plat and price list at offices of

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And FRANK BUSH, Agent Land Department N. P. R. R., Livingston, Montana.

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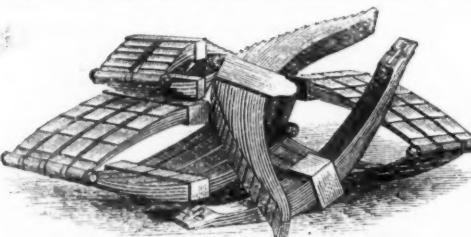
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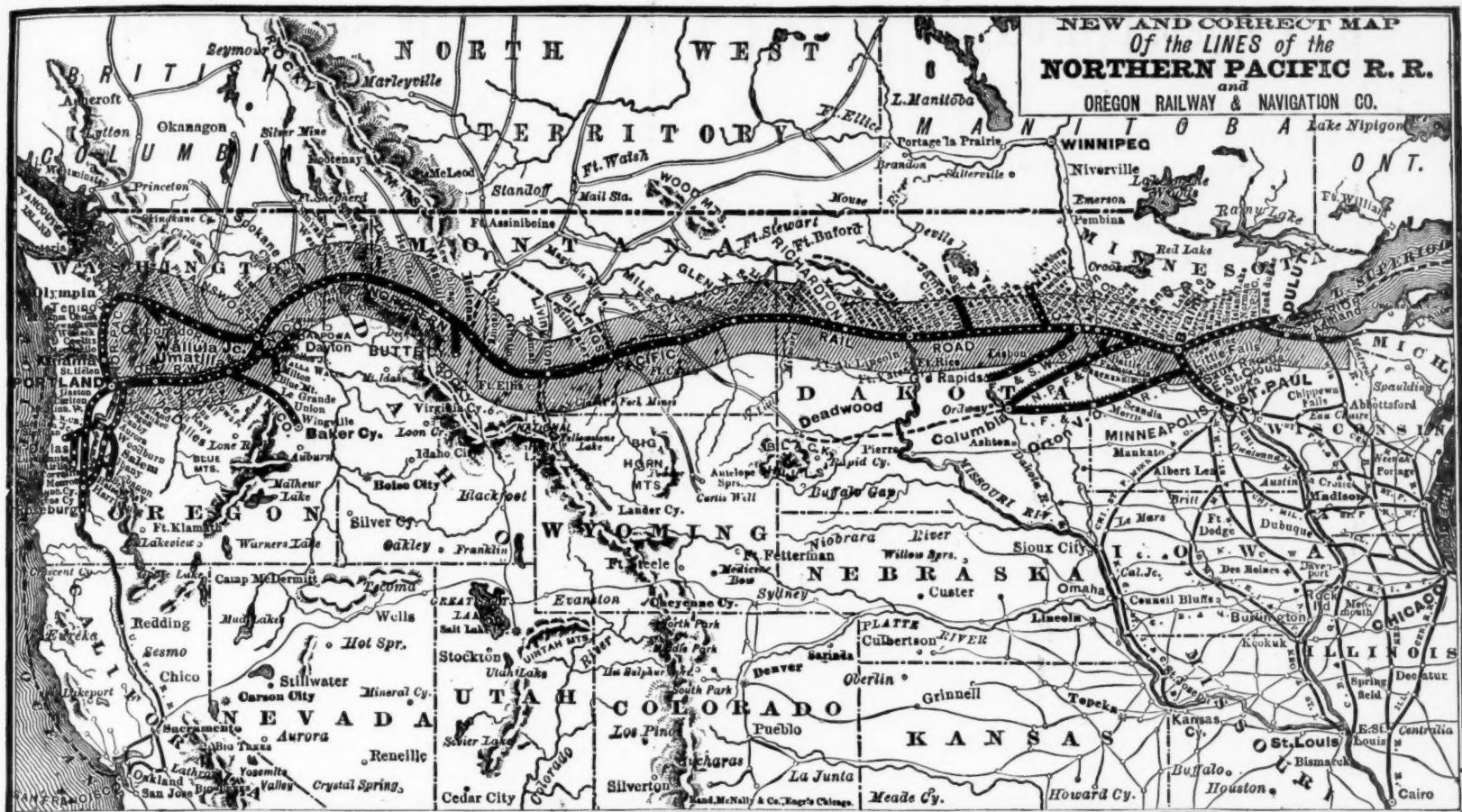
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A TALK WITH THE TRAVELING PUBLIC.

DO NOT FORGET, in planning your pleasure excursions and business tours for this year, that the Northern Pacific Railroad will be completed next summer, and will open the most attractive 2,000 miles of railway travel in America. Before the connection is made between the ends of track advancing from the East and the West, you can pass over the gap in the Rocky Mountain region in comfortable Concord coaches. You need not wait for the line to be finished to start over it for the Pacific Coast. The ride across the Rockies on top of a stage coach will be among the most delightful experiences of your trip.

We have space here only to make brief mention of a few of the striking, beautiful and wonderful features of the journey across the continent by the Northern Pacific Road. You will see, first, the busy, twin cities of St. Paul and Minneapolis and the Falls of St. Anthony, where the Mississippi River turns the wheels of the largest flouring mills in the world. The big lumber mills in the pineries of northern Minnesota will be worth seeing, and also the Lake Park region of western Minnesota, where there are more beautiful lakes, abounding in fish, than you can easily count. Further on comes the broad, rich plain of the Red River Valley, fast becoming an immense wheat field. Stop a day at Fargo or Moorhead, and a day at one of the bonanza farms.

After passing Valley City, Casselton, Tower City and Jamestown, about 200 miles west of Fargo, you cross the Missouri River on the new Bismarck Bridge, near the young city named after the great German statesman, and traveling 50 miles more through green valleys, come to the famous *Mauvaises Terres* of the Little Missouri, now called Pyramid Park, a region of wonderful petrifications, mountains of red terra cotta, burning coal seams baking the superimposed masses of blue clay, and strange and grotesque rock formations.

Reaching the Yellowstone at Glendive, you journey up that lovely stream for 340 miles, through Miles City, Billings and other new towns to Livingston, where you should leave the main line and make an excursion

of about seventy miles to see the giant geysers, magnificent waterfalls and other wonders of the Yellowstone National Park. Returning, you will cross the first range of the Rockies at Bozeman, run north 100 miles to Helena, cross the main Divide, and then go down hill with the course of the streams all the way to the Pacific Coast. At Helena you should stop to see the neighboring gold mines, where the quartz rock is mined and crushed. Near Garrison, west of the Divide, you can see hydraulic mining on a large scale.

The wild cañon of Hell Gate River, the fertile valleys of the Bitter Root and the Missoula, the Flathead Indian camps on their reservation, the Jocko and Flathead Valleys, and the valley of Clark's Fork hemmed in by lofty forest-covered mountains, will next invite your interest. Then comes Lake Pend d'Oreille, far more beautiful than Lake George; then the impressive double falls of the Spokane River, and a day later all the varied and fascinating scenery of the mighty Columbia.

At last comes the rich and pretty city of Portland, from whose streets you can see five magnificent snow peaks. Then you can go still further, and see the deep blue waters of Puget Sound, mirroring the gigantic white forms of Mount Tacoma and Mount Baker, the great saw-mills, the neat towns nestling in the fir forests, and if you wish to journey so far, the handsome capital of British Columbia, Victoria, and the broad Strait of Juan de Fuca, from which rise the precipitous walls of the Olympian Mountain Range.

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Messrs. ALLEN & LEWIS, Portland, Oregon.

Jan. '83—cu.

\$500,000

Rio Grande & Pecos R.R. Co.

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Interest Payable June and December.

MERCANTILE TRUST COMPANY, New York City, Trustees.

PRICE, 95 AND ACCRUED INTEREST.

These bonds are secured by a first mortgage of \$16,000 per mile of standard gauge track, from Laredo, Texas, to the Coal Fields situated on the Rio Grande River, together with all its property, right of way, terminal facilities, etc.; also on 20,000 acres of coal lands, which are opened and being rapidly further developed, and are producing already an excellent quality of coal.

The present demand for this coal from the International and Great Northern, the Texas Mexican, the Mexican National Railroad Companies centering at Laredo, and for manufacturing and domestic purposes, will provide net earnings over and above cost of mining and transportation of at least double the amount required to pay interest on the above mentioned bonds.

Having made a personal examination of this property, we believe we are fully justified in making the above statements, which, as regards profits, are much below the statements of the projectors and officers of the Company.

More definite information will be furnished on application; also, the report of Mr. JOHN BIRKINBINE, Civil Engineer, who has recently examined for us the Railroad and Coal Fields.

CHAS. D. BARNEY & CO.,

114 SOUTH THIRD STREET,

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April —

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MARTIN LUSCOMB, Sec'y and Treas.

GEO. W. RICHARDSON, Sup't.

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CAPITAL, \$100,000.00.

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LOCOMOTIVE "POP" SAFETY VALVE.

The annexed cut represents our new pattern Encased Locomotive "Pop" Safety Valve and Bushing. The spring is nickel-plated to protect it from corrosion. The construction of the case is such as to greatly reduce the noise of escaping steam. The capacity of the Richardson Valve to relieve a boiler is greater than that of any other make. They can be furnished with relief levers when required.

SOLE MANUFACTURERS OF THE ONLY

Solid Nickel-Seated "Pop" Safety Valve,

The only perfect Safety Valve made. For Stationary, Marine and Portable Steam Boilers. Approved by the U. S. Board of Supervising Inspectors, and allowed for use on Marine Boilers at one-half the area of Lever Safety Valve. Our patents cover all Safety Valves utilizing the recoil action of steam, and familiarly known as "Pop" Safety Valve. Purchasers, beware of infringements of our patents. Send for descriptive circular.

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